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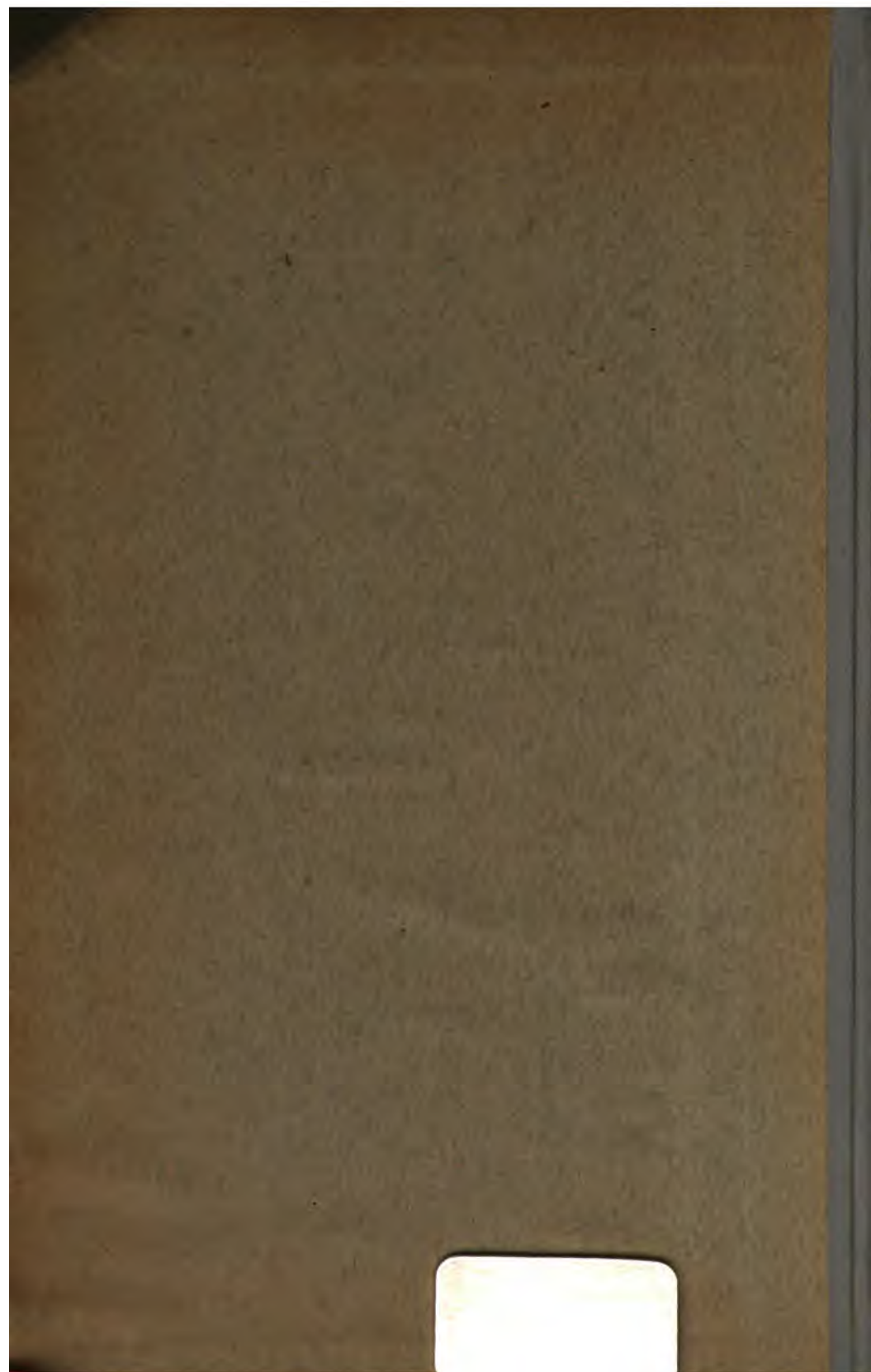
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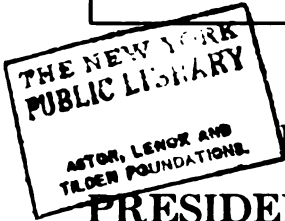
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★ OFFICIAL REGISTER OF  
HARVARD UNIVERSITY

VOLUME X

FEBRUARY 20, 1913

NO. 2, PART I



REPORTS OF THE  
PRESIDENT AND THE TREASURER  
OF HARVARD COLLEGE

1911-12



PUBLISHED BY THE UNIVERSITY  
CAMBRIDGE, MASS.



**REPORTS OF THE  
PRESIDENT AND THE TREASURER  
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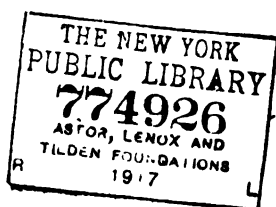
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## TREASURER'S STATEMENT



## PRESIDENT'S REPORT FOR 1911-12

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### TO THE BOARD OF OVERSEERS: —

The President of the University has the honor to submit the following report for the academic year 1911-12: —

Since the last report was written the vacancy in the Corporation, caused by the death of Judge Francis Cabot Lowell on March 6, 1911, has been filled by the election of Robert Bacon, who relinquished his post as Ambassador to France to serve the University. He had hardly taken his place when another was left empty by the death on November 4, 1912, of Dr. Arthur Tracy Cabot, one of the most faithful and sagacious counsellors that we have ever had. Eminent as a surgeon, he had retired from his large practice a year before to give the rest of his life to public service; and we had looked forward to many years of coöperation and companionship with him.

The losses suffered in the instructing staff during the year covered by this report have been unusually heavy. Professor William Watson Goodwin died on June 15, 1912. Although on the retired list since 1901, and in declining health for the three last years, his name was an honor to the University, and the memory of his long service and great scholarship will not cease to be cherished. On July 30, Dr. Maurice Howe Richardson, Moseley Professor of Surgery, died suddenly in the full tide of his extraordinary activity. His devotion to the interests of the Medical School was constant, and he won the affection of vast numbers of patients in his private and hospital practice. Charles Robert Sanger, Professor of Chemistry and Director of the Chemical Laboratory, died after a prolonged illness on February 25th. His death thinned grievously the depleted ranks of the chemical staff. On April 7th died Abbott Lawrence Rotch, Professor of Meteorology, who founded and maintained at his own expense the Observatory at Blue Hill, which he devised to the University. A pioneer in a new field of

science, his presence cannot soon be replaced. At the close of the year Charles Loring Jackson, Erving Professor of Chemistry, retired, after a distinguished service of forty-four years as teacher and investigator; Arthur Searle, Phillips Professor of Astronomy, retired also, after devoting to the Observatory forty-three years; William Morris Davis, whose name is as well known abroad as in Cambridge, resigned the Sturgis-Hooper Professorship of Geology; and George Santayana, Professor of Philosophy, to our regret preferred in middle life to return to Europe. The Medical School lost through resignation three of its most eminent clinical professors: Dr. Frederick Cheever Shattuck, Jackson Professor of Clinical Medicine; Dr. James Jackson Putnam, Professor of Diseases of the Nervous System; and Dr. Edward Hickling Bradford, Professor of Orthopedic Surgery. The last of these was happily prevailed upon to accept the position of Dean of the School, in place of Dr. Henry Asbury Christian, who was obliged to resign because his professorship and his new duties as physician-in-chief of the Peter Bent Brigham Hospital will fill all his time. Dr. Christian's work as Dean, in bringing about closer relations between the Medical School and the various hospitals, will mark an epoch in the progress of the School.

The new appointments made in the staff of the Medical School in consequence of these vacancies will be referred to in describing the condition of the School. The appointments and promotions to professorships in the Faculty of Arts and Sciences have been as follows: —

IRVING BARBITT,	Professor of French Literature.
REGINALD ALDWORTH DALY,	Sturgis-Hooper Professor of Geology.
WILLIAM SCOTT FERGUSON,	Professor of Ancient History.
ELMER PETER KOHLER.	Professor of Chemistry.
ARTHUR MICHAEL.	Professor of Organic Chemistry.
WILLIAM BENNETT MUNRO,	Professor of Municipal Government.
CHARLES PALACHE,	Professor of Mineralogy.
WALTER RAYMOND SPALDING,	Associate Professor of Music.
JAY BACKUS WOODWORTH,	Associate Professor of Geology.
CHARLES HENRY CONRAD WRIGHT,	Associate Professor of the French Language and Literature.

Although not strictly within the Faculty of Arts and Sciences, the promotion of Solon Irving Bailey to the Phillips Professorship of Astronomy may be mentioned here.

In the last annual report figures were presented concerning the number and geographical distribution of students admitted to Harvard College under the old and new methods of examination. In the second year of its trial the new method has been used more freely, and the proportion of candidates who failed, although larger than under the old method, was much less than at the first experiment, — perhaps because the nature of the test was better understood and fewer boys tried it merely on the chance that it would prove easy to pass. The number of candidates under the new plan and the percentage of failures for the two years have been as follows: —

	1911	1912
Applicants .....	185	259
Records not approved ...	46	46
Admitted .....	83 = 59.7%	154 = 72.3%
Rejected .....	56 = 40.3%	59 = 27.7%

Under the old plan in 1911 17.1 per cent of the candidates were rejected, and 8.1 per cent did not reappear to complete their examinations in September; in 1912, 19.1 per cent were rejected, and 6.1 per cent failed to reappear.

The distribution of the students admitted by the new method — geographically, and as between public and private schools, — does not differ much from last year, save that private preparatory schools in Massachusetts have begun to make some use of the new plan. Since it gives them greater freedom in their curricula, they are likely to resort to it more in the future. The following table shows the distribution for the two years by percentages: —

	1911		1912	
	Old Plan	New Plan	Old Plan	New Plan
From public schools .....	45.7	80.5	41.8	79
“ private and endowed schools ....	54.2	19.4	58.1	20.9
“ schools in Massachusetts .....	72	41	72.7	42.2
“ schools in New England .....	85	47	87.1	51.2
“ schools in other Atlantic States ..	8.5	31	8.1	28.5
“ schools west of the Alleghanies ...	4.5	21	3.8	19.4

The results of the examinations will be found in greater detail in the report of the Chairman of the Committee on Admission.

That the new examinations are a good test of fitness for college work would seem clear from the records in their first year of the students recruited thereby, as shown in the report of the Dean of

Harvard College. The proportion of low grades among the seventy-nine Freshmen who entered in this way in 1911 is much less, and the proportion of high grades decidedly larger, than for the average of the class. These young men have proved that they are qualified to pursue college studies; and, whether they could have passed all the examinations required under the old plan or not, they are admitted without conditions. The result is that of the 598 men who were admitted by examination and actually entered the Freshman class in 1912, 402, or more than two thirds, entered clear. That is a great advantage both to them and to the College, for conditions are an additional burden upon students who ought to devote all their scholastic energy to college work. They are a heavy drag upon the Freshman year. Borne chiefly by the weakest, or least well equipped, they hold these men back and slow down the pace of the whole class.

The report for last year contained also a table showing the number of Freshmen who had chosen each of the fields of study for the concentration of their college work. The choices made by the Freshmen last May were not very different; but for that very reason, as showing a tendency rather than accident, a comparison of the two years is not without interest. The principal changes are increases in the actual numbers concentrating in Classics, English, Comparative Literature, Chemistry, Mathematics, and Philosophy; and a slight relative decrease in the number in the group of History, Economics, and Government.

#### CHOICES OF SUBJECTS OF CONCENTRATION

Subjects	Class of 1914	Class of 1915
The Classics .....	12	22
English .....	42	74
Romance Languages .....	45	39
Germanic Languages .....	9	14
Comparative Literature .....	3	12
History and Literature .....	9	4
Fine Arts .....	12	14
Music .....	9	6
Architecture .....	6	
Too vaguely expressed as Modern Languages .....	9	
Total, Group I.....	156	185

Subjects	Class of 1914	Class of 1915
Engineering .....	55	43
Chemistry .....	38	72
Biology .....	14	12
Geology .....	5	4
Physics .....	4	7
Anthropology .....	1	
Special Combinations .....		3
Too vaguely expressed as Natural Sciences .....	2	
<b>Total, Group II.....</b>	<b>119</b>	<b>141</b>
Economics .....	133	132
History .....	41	50
Government .....	25	33
Anthropology .....		2
Too vaguely expressed as History and Political Science .....	33	
<b>Total, Group III.....</b>	<b>232</b>	<b>217</b>
Mathematics .....	9	21
Philosophy .....	3	9
<b>Total, Group IV .....</b>	<b>12</b>	<b>30</b>

*Percentages of Concentration*

Language, Literature, Fine Arts, and Music .....	30%	32%
Natural Sciences.....	23%	25%
Economics, History, Government .....	45%	38%
Mathematics and Philosophy .....	2%	5%

A few men have been allowed for good reasons to change their field of concentration, but they are not numerous enough to have a material effect upon the percentage. These tables indicate the main subjects of the students' work, but we must remember that they by no means express either the range of studies pursued by the individual student or the amount of instruction given by the several departments, for every undergraduate is obliged to distribute six of his courses among the groups in which his main work does not lie, and he may use his four free courses in the same way.

The oral examinations in French and German, which went into effect for the Class of 1914, required that no student should be registered as a Junior unless he could read one of those languages with fair ease and accuracy. The examinations were held three or four times a year; and the result, as stated in the last annual report,



has been that each time about one half of the applicants failed. But the student may work on the language and try until he passes; and the upshot illustrates the general experience that students will rise to any reasonable standard which is seriously required; for by the end of October, 1912, only thirty-three members of the Class of 1914 had failed to pass the examination. Thus the object of the rule has been in large measure attained — that of ensuring among the upper classmen an ability to use books in at least one foreign language.

In the last annual report the adoption of general examinations in the Medical School, as a substitute for, or supplement to, the passing of a series of separate courses was described, and it was stated that the subject was under consideration in the Divinity School also. A general examination of this character has now been adopted for the degree of Bachelor of Divinity, and for that of Master of Divinity. The latter is a new degree conferred after a year of study, and designed to replace so far as possible the degree of Master of Arts hitherto conferred upon graduate students in the School by the Faculty of Arts and Sciences. The regulations for these general examinations in the Divinity School, and for the courses of study leading thereto, are printed in an appendix to this report.

The same principle has been discussed in Harvard College. After a year of careful study, the Division of History and Political Science,—comprising the Departments of History, Economics, and Government,—formulated a plan for a general examination before graduation of students concentrating in these subjects. The plan, which was brought before the Faculty this autumn, was adopted after debate in three meetings, and has since been approved by the governing boards. It lays down briefly the general principles, and, together with the outline of this plan prepared by the Division, will be found in a second appendix to this report.

In describing the general examinations for the Medical School something was said of the principle on which they are based; but the subject merits fuller treatment, because it involves a more radical change in American educational practice than anything the University has done for many years. It means a change not so much in machinery as in object; not of methods alone, but of

the point of view. So far as I am aware, general examinations of some kind exist in all European universities, except for a degree with a mere pass in Scotland and the provincial universities of England. They have been used in the past in American colleges. In a very crude form they were at one time prescribed for graduation from Harvard; and in some other colleges they lasted until after the middle of the last century. Since the curriculum of those colleges comprised many subjects, the examination, which covered them all, was open to the criticism now heard of the general examination for graduation from the German gymnasium. It was almost of necessity a review of unconnected studies; an effort of memory, preceded by a strenuous cram. But whether in such a test the disadvantages outweigh the benefits or not, it was quite inapplicable after the elective system had been adopted in a thorough-going form at Harvard and more or less completely by other colleges. The student being allowed to select as he pleased among all the courses of instruction offered by the Faculty, a general examination would have covered a different ground for each student; would have been merely a repetition of the examinations in separate courses which the student had already passed; and could not have required reading outside of the courses, or demanded a correlation of information obtained in courses in diverse fields. But now that every student is obliged to take six courses in some one field, the situation has changed, and the way is open for this valuable instrument of education in that field. To the courses distributed among other subjects it is still inapplicable; but in the field of the student's concentration his attention can be directed, as it should be, to the subject pursued, rather than to the particular courses taken, which then become not ends in themselves but only efficient means to an end. By examinations well devised for the purpose the student can be made to reflect upon the subject as a whole, correlating the several parts; and the interest of an intelligent man follows his efforts. Moreover, he can be induced to read books outside the strict limits of his courses in order to fill in the gaps; for the habit of independent reading has fallen sadly out of use among undergraduates at the present day.

A general examination has drawbacks as well as merits. If it tends to fix attention on a subject wider than any single course, it

tends also to make the passing of that examination the goal, and to lessen interest in matters unlikely to appear there; and hence, unskilfully used, it may lead to the cramming of information by expert tutors without serious effort to master the subject. But if skilfully used, it may be made a powerful instrument for promoting coördination of knowledge, a broad comprehension of the subject, a grasp of underlying principles instead of memory of detached facts, and in some subjects may provide an incentive to intellectual effort such as no other type of examination can offer.

The benefits to be gained from a general examination are not needed equally in all fields of learning. In some subjects, like Mathematics, Physics, and Chemistry, every advanced course must require familiarity with the principles taught in the more elementary ones, so that an examination in the higher branches measures fairly well the command of the whole subject. In other departments, notably History, there is little natural sequence, and a student may in his Senior year pass an excellent examination in a course on Europe in the nineteenth century although he has completely forgotten the American history he studied as a Sophomore,—and yet the events on the two sides of the Atlantic are intimately related parts of one movement in human progress. The general examination may well be applied, therefore, in one field while it is not in another; and the Faculty has been wise in allowing one division to adopt the plan without requiring uniformity in all.

If the general examination stood alone, the optimism of many undergraduates would lead them to postpone preparation until the time drew near, and then it would be too late. This could be justified only on the assumption that the function of the College was limited to providing earnest men with opportunities for education, probably with the result, witnessed in the German universities, that a large part of the students would make no attempt to obtain or earn a degree. No one would advocate such a plan for undergraduates here. American colleges must strive to form character, to induce habits of diligence; and they must do so all the more because, unlike the German universities, they are not groups of professional schools with the stimulus of direct preparation for one's career in life. It is not proposed, therefore, to abandon examinations in the several courses except so far as they occur at the same time as the general examination. Moreover, if

the student is expected to study a subject, to regard his courses as means rather than ends, to do some outside reading, he must have special guidance beyond that which is provided in the courses he takes. There must be tutors, not unlike those at the English universities, who confer with the students frequently, not about their work in courses alone, but also about their outside reading and their preparation for the final test that lies before them. Tutors of this kind are an integral and necessary factor in the plan. To provide them will require money, part of which has been promised, while the rest must be sought from friends of the College; and the benefit to the students is well worth the expense involved. The great advantage for the average student of a general examination upon his principal field of study, lies in forcing him to correlate what he has studied, to keep it in mind as a body of connected learning, to fill in gaps by reading, to appreciate that all true education must be in great part self-education, a personal effort to advance on the difficult path of knowledge, not a half-reluctant transportation through college in perambulators pushed by instructors.

No one in close touch with American education has failed to deplore the lack among the mass of undergraduates of keen interest in their studies, the small regard for scholarly attainment; and a general examination upon a field of concentration seems to offer the most promising means of improvement. It was the method adopted in England a hundred years ago. The class tests at Oxford based on general public examinations began in 1802, and five years later they were divided into the Honour Schools of *Literae Humaniores* and Mathematics and Physics.\* The effect in stimulating interest in scholarship and respect for high rank was rapid, profound, and permanent. Success in the examinations has been universally accepted as a test of ability and a gateway to the careers entered by Oxford and Cambridge men. The failure of American undergraduates, and, following their lead, of the American public at large, to value excellence in college scholarship is due in part, as the students themselves de-

\* The Mathematical Tripos at Cambridge began in 1747, the Civil Law Classes in 1815, the Classical Tripos in 1824. The other triposes at Cambridge and Honour Schools at Oxford were established at various dates after the middle of the nineteenth century.

clare, to the fact that rank in courses depends upon the varying standards maintained by different instructors. It is due also to a sincere doubt whether one who can accumulate the largest number of high marks in short stretches of work is really the ablest man. Much must be ascribed, moreover, to the absence of competition on a large scale. So long as college men are all treading separate paths, crossing at many points but never leading to a common goal, there can be little of that conviction of superior qualities which attaches to the man who succeeds in achieving what many others are striving for. A well-ordered general examination avoids all of these imperfections, for it provides a uniform standard, a competitive test and a run long enough to call out the whole power of the man. The stimulus is not only good for those who hope to win high distinction, but will tend also to leaven the whole mass.

To turn from studies to athletics is to leave a region where competition has been neglected for one where it has been carried to an extreme by the students themselves. The prevailing interest in athletic sports has done much for sobriety and cleanliness of life in college, but the vast scale of the public games has brought its problems. They have long ceased to be an undergraduate diversion, managed entirely by the students, and maintained by their subscriptions. They have become great spectacles supported by the sale of tickets to thousands of people; while experience has proved that skilful coaching will determine the victory between teams of approximately equal strength. The result has been an enormous growth in expenditure until the authorities have felt compelled to take part in supervising it. The experiment of control by an Athletic Committee composed of three members of the Faculty and three graduates appointed by the Governing Boards, and three undergraduates selected by the captains of the teams, has brought improvement. Extravagance has been curtailed; but, with a revenue of about two hundred thousand dollars a year, money comes easily and is easily spent under the spur of intense public interest in the result of the major contests, and a little laxity quickly leads to grave abuse. Extravagance still exists and vigilant supervision is required to reduce it. Graduates, who form public opinion on these matters, must realize that inter-

collegiate victories are not the most important objects of college education. Nor must they forget the need of physical training for the mass of students by neglecting to encourage the efforts recently made to cultivate healthful sports among men who have no prospect of playing on the college teams.

The promotion of a better college life, physical, intellectual and moral, has received much attention of late among men engaged in education. At Harvard we believe that a vital matter is to launch the student aright on the new freedom of college life by means of Freshman dormitories; and it is a pleasure to state that enough money has been subscribed to build three out of the four buildings projected. These three will house over four hundred and fifty students, or by far the greater part of the present Freshman class that does not live at home. One of them will be paid for by the bequest of the late George Smith, left to the College many years ago to accumulate until it reached the sum required to build a group of three dormitories of the collective size of one of the quadrangles designed. Another has been generously given by Mrs. Russell Sage, and at her request will be named Standish Hall. The third is provided by a large number of subscriptions from alumni and others. The project will not be complete until the fourth is given, but the erection of the first three will be begun early in the coming year, as soon as the working plans, now progressing rapidly, have been completed. One of the quadrangles will be on Boylston Street, behind the Power House, while the others will be built farther to the east along the parkway as far as De Wolf Street. Their buildings will stand on three sides of quadrangles, the fourth side facing the river being open to the south. The architect, Mr. Charles A. Coolidge, has adapted to the purpose with great skill the colonial style of the older buildings in the College Yard.

People not very familiar with the progress of the plan have expressed a fear that the Freshmen would be treated like boys at boarding school; but that would defeat the very object in view, of teaching them to use sensibly the large liberty of college life. Liberty is taught to young men not by regulations, but by its exercise in a proper environment. The vital matter is the atmosphere and the traditions in which the youth is placed on entering

college. At present he is too much enchained in a narrow set of friends who copy one another, not always wisely, and come too little into contact with the broadening influences of the college community as a whole. Hence he fails to see how much he can get out of college life, or finds it out too late to reap the full benefit thereof. The Seniors show their appreciation of all this by rooming together in the Yard, but they end where they should have begun.

In the School of Applied Science important changes have taken place during the year. A number of technical courses have been removed from the list open to undergraduates, carrying forward the design of placing the School on a graduate basis. At the same time the plan of instruction has been modified and made more intensive in method, so that a college graduate without technical preparation can be taught his Engineering, Mining, or Architecture in the shortest possible period. No doubt it will take time for the community to learn that a man who hopes to rise high in his profession gains in the end by a college education preceding his technical studies. Engineering ought to stand among the liberal professions which are enriched by a general education, and in fact the number of college men who enter engineering schools, though still small, is increasing year by year.

The organization of the School has also been altered. At the suggestion of the instructors, the departments have been formed into Schools of Engineering, of Mining and Metallurgy, of Architecture and so forth, each under a Council of instructors, the whole being grouped under a new and distinct Faculty of Applied Science. This has the double advantage of giving the Schools a more strictly professional tone under the government of a body devoted wholly to their interests, and of relieving the Faculty of Arts and Sciences of questions hardly germane to its regular work. The new organization nominally went into effect in September, 1912, but in fact the Faculty of Applied Science began its services in the year covered by this report, and its members are glad to work out their common problems in a meeting of this kind.

The Graduate Schools of Applied Science possess an admirable staff of professors, and already in some directions excellent equip-



ment, but as yet few students, for the reputation in the profession which fills the classes is naturally of slow growth. It cannot be stimulated rapidly, and depends upon the achievements of the men that the institution has produced. These are the principal means of recruiting fresh students for any school, and years must always pass before their influence in the community is strongly felt.

Since the last report was written the Massachusetts Institute of Technology has decided, at the request of great numbers of our fellow citizens, to erect its new buildings in Cambridge, and this brings home to us the question whether some coöperation between the two institutions is not possible in the training of students who are graduates of colleges or technical schools. That would not trench upon the principal field of the Institute of Technology, while it would add greatly to the efficiency of training college graduates, to whose needs the curriculum provided for boys coming from high schools is imperfectly adapted. The number of such college graduates is, and for an indefinite time to come will be, far too small to justify two separate schools; and that is even more true of the men who, after finishing the regular technical course, want to pursue advanced work. To maintain two distinct plants, fully staffed and equipped, for the teaching of an insufficient number of students in the most expensive of all kinds of education is not only a waste of educational resources, but entails an even more pitiful loss of efficiency. The momentum obtained by a combined effort would be far greater than that of two separate schools striving singly for the same object. No plan of coöperation has been devised, but the difficulties ought not to be insuperable if approached with mutual good will and a sense that an educational institution does not exist solely for its own glory, but as a means to a larger end.

Some comment was aroused by the decline in the number of students in the Law School at the opening of the term in October, 1912; but this is due, as the Dean explains in his report, not to the size of the entering class, which is substantially as large as ever, but to raising the standard for continuing in the School in the case of men whose work has been defective. Since the School has grown larger it has become both possible and necessary

to insist on thoroughly satisfactory work by all students who attend the classes and who by their very presence affect the standard. The number of graduates of Harvard College who enter the School has, indeed, fallen off of late years; but this, as the elaborate report of the National Bureau of Education on the occupation of college graduates shows, is part of a general movement which is felt most promptly at Harvard. To inquire into its causes would not be possible here. It is enough to point out that the occupations in which college men engage have enlarged greatly, and the attractions of business life have grown stronger. The report of the Bureau, with its diagrams of historic changes in the proportion of graduates following different vocations, is highly interesting.

The year has been marked in the Medical School by the appointment of two new deans. That of Dr. Bradford as Dean of the School has already been mentioned. The other office is new. For many years courses of instruction, both clinical and in the laboratories, have been offered for the benefit of physicians and surgeons in active practice. A large part of these have been included in the Medical Summer School, while others have been given in term-time. The science and art of medicine are advancing so rapidly that many practitioners are glad of opportunities to gain a greater familiarity with recent methods than they can get from medical journals alone; and the Faculty felt that instruction of this character could profitably be made more systematic. A Graduate School of Medicine has, therefore, been created, with a separate dean and administrative board, and to some extent an additional staff of instructors, although not a distinct Faculty. Dr. Horace David Arnold has been appointed Dean; and the School opened its courses in October, 1912, with a very promising registration.

Reference has been made on a preceding page and in former reports to the closer relations between the Medical School and the different hospitals. The central factor in the movement is the alliance with the Peter Bent Brigham Hospital, situated opposite the main entrance to the School. The buildings are nearly completed, and will be ready for the first patients in a few weeks. In accordance with the arrangement for a joint selection of the

staff of the Hospital and instructors in the School, Dr. Christian, our Hersey Professor of the Theory and Practice of Medicine, is the Physician-in-Chief of the Hospital, and Dr. Harvey Cushing, formerly of Johns Hopkins University, is Surgeon-in-Chief and has taken his chair as Moseley Professor of Surgery at the School. The other members of the staff have been selected by mutual understanding.

Notable also in the history of the School have been the opening of the Collis P. Huntington Memorial Hospital for cancer in close coöperation with the School, and the calling for the first time of a non-resident to a chair in the School and a leading position on the staff of the Massachusetts General Hospital. Dr. David Linn Edsall, formerly of the University of Pennsylvania and later of Washington University at St. Louis, was appointed chief of one of the two continuous medical services at the Hospital and Jackson Professor of Clinical Medicine in the School. The only other appointment to a full professorship has been the promotion of George Gray Sears to Clinical Professor of Medicine.

The year has been remarkable for a series of contributions to medical science made at the School. During the summer and autumn of 1912 Dr. Folin published his discoveries in metabolism, which made a profound impression, and his analysis of the blood in cases of rheumatism and gout; Dr. Mallory, his discovery of the germ of whooping cough; while Dr. Rosenau, with the coöperation of Dr. Richardson of the State Board of Health and Professor Wheeler of the Bussey Institution, ascertained that infantile paralysis was transmitted through a species of stable fly (*Stomoxys calcitrans*). Enlarging the bounds of knowledge is a function of a university no less essential than imparting it; and in no field are the two more closely connected today than in medicine. Three such discoveries in the course of a single year are, therefore, a deep source of gratification.

During the year we have been fortunate in our exchange professors, both in those we have received and those we have sent forth. From France came Dr. Charles Diehl, Professor of Byzantine History at the University of Paris; from Germany Dr. Willy Kükenthal, Professor of Zoölogy and Director of the

Zoölogical Institute at the University of Breslau. To Berlin we sent Professor Theobald Smith of the Medical School, and to Paris Professor William Morris Davis of the Geological Department. The alliance whereby we are to send annually a member of our staff to lecture for a month at each of four Western colleges, Knox, Beloit, Grinnell and Colorado, was inaugurated during the second half of the year by Professor Albert Bushnell Hart. Instructors were sent to Harvard by two only of these colleges. They were Walter Houghton Freeman, Instructor in Greek at Grinnell, who acted as Assistant in Greek here; and Elijah Clarence Hill, Head Professor of Romance Languages and Literature at Colorado, who gave an independent course in Spanish-American poetry.

The University as a whole rejoices in the munificent offer of a new library building by Mrs. George D. Widener. Gore Hall has long been lamentably insufficient to contain the books on its catalogue. Many thousands of them, in yearly increasing numbers, have been stored in the basements of other buildings, while Gore Hall itself has been far too crowded for a proper use even of the volumes on its shelves. Among the precious lives lost on the "Titanic" was that of Harry Elkins Widener of the Class of 1907, a rare collector of rare books. His collection, comprising many editions of great value and interest, he left to his mother, with a request to give it to Harvard when there was a building suitable for the purpose. But Gore Hall was not fireproof, and Mrs. Widener, in view of the conditions, generously determined to build a complete university library on the general interior plan worked out by our committee of architects a year ago, with additional rooms for her son's books in a part of the open court in the centre of the building. These rooms and the volumes they contain are to be under the charge of a special librarian selected by Mrs. Widener, who gives also a fund of \$150,000 to care for, and at her discretion to enlarge, the collection. The other parts of the Harry Elkins Widener Memorial Library will form the four sides of a quadrangle, whereof the northern side, with the main entrance, will cover very nearly the site of the present Gore Hall, and the south front will be about one hundred feet from Massachusetts Avenue. The building will contain one large and several smaller reading-rooms on the

North, and rooms for seminars on the upper floor; while the greater part of the eastern, western and southern sections will be occupied by the stack, in which, however, there will be provided working rooms for professors and a large number of tables separated by glass screens for other readers. Such an arrangement is designed to make the stack as convenient of access as possible to the scholars who use it, so that they may work with all their tools at hand.

Housing our books where they would be safe and could be used during the construction of the new building was no easy problem. It has been solved partly by turning Upper and Lower Massachusetts into reading-rooms; partly by the hospitality of Andover Theological Seminary, which has kindly allowed us to use any vacant space on its shelves; partly by sending appropriate books to various departmental libraries; but chiefly by transferring the students' dining-tables from Randall Hall to Foxcroft, and building temporary stacks for four hundred thousand volumes in the Hall, one of the few fireproof buildings we possess. Although the transfer of the books was made in term-time, it was carried out by Professor Coolidge, the Director of the Library, with such skill that there has been almost no interruption in their use.

Another important gift of a building has been that of a chemical laboratory by the Hon. T. Jefferson Coolidge in memory of his son, Thomas Jefferson Coolidge, Jr., of the Class of 1884. This building will be nearly of the same size as the Wolcott Gibbs Laboratory, and will be used for quantitative analysis. It faces Divinity Avenue, and will form part of the proposed, and sorely needed, group of chemical laboratories between that Avenue and Oxford Street. Work upon it has been carried on as rapidly as possible, with the result that by the end of the year 1912 the outer walls were built and the timbers of the roof were laid, ensuring its readiness for use before the opening of the next college year.

Of the other gifts received the largest have been: that of Mrs. Sage for the Freshman Dormitory; \$100,000 from the Class of 1887 on its twenty-fifth anniversary; \$125,000 from Mr. Edmund Cogswell Converse to found a professorship of Banking in the School of Business Administration; \$100,000 from Mrs. Collis P.

Huntington for the construction of the Cancer Hospital; \$74,285.71 from the estate of Mrs. William O. Moseley for travelling fellowships in the Medical School; \$50,000 from the estate of Miss Harriet E. Goodnow to keep poor students in Harvard College; \$50,000 from Mr. George R. Agassiz for the use of the Museum of Comparative Zoölogy. These and many other benefactions are described more fully in the report of the Treasurer.

Recipients of such generosity seem churlish in asking for more, but our needs are ever outrunning our resources, and one of the objects of the annual report is to point them out. There is still a deficit in the University, College and Library account, although for the year 1911-12 it was reduced to \$14,750.40. Until it disappears we cannot expect an expansion of those departments that are undermanned, and still less any increase in salaries. That the incomes of professors are inadequate in view of the grade of talent required is generally admitted, and the constant rise in prices has been reducing their purchasing power year by year. One of the most pressing special needs is more laboratories for instruction and research in Chemistry, perhaps the most promising field for scientific investigation and one in which our equipment is still singularly insufficient. Another is an endowment for the Dental School, the imperative need of which was urged in the last report with a reference to the great services rendered to the public by the operating rooms and the sacrifices of the clinical instructors. Still another is the endowment of professorships in the School of Business Administration. One such, in Banking, has been founded as already stated by the generosity of Mr. Converse, but three more are required, and efforts are being made to raise the funds by subscriptions. Every professional school has meant the substitution of thorough instruction in the principles of an art for the slower and less comprehensive process of learning them by apprenticeship; and this School is based on a belief that the principles governing business organization and methods, which have been wrought out in practice by the labor of a generation of expert administrators, can be taught in a way to save the time of the student and make him more efficient. No new professional school, moreover, demonstrates its full value swiftly, and we need not be surprised that most of the students in our

School still think a single year of its training sufficient. That the School, however, has already won recognition of its usefulness is proved by the rapid increase in the number of men entering it. During the first few years the progress was naturally slow, but the period of experiment appears to have passed; for the number of first-year students taking full work rose in the autumn of 1912 to 71 as against 45 the year before, and these 71 were graduates of 35 different colleges in all parts of the country.

Friends of the University are trying to raise money for a building for the Department of Music. The sum required to erect the building has been generously offered on condition that \$50,000 is subscribed for its maintenance, and this is nearly accomplished. An effort is also being made to enlarge the Peabody Museum of Archaeology and Ethnology in accordance with the original plan, and the subscriptions for this purpose are well under way. The collections of American ethnology are large and constantly growing, too large already for the building now standing. When the addition is built the University Museum designed by Mr. Agassiz will be complete.

The University now possesses several special funds for the publication of books or periodicals on various subjects. These funds in the aggregate are considerable, but there is a growing conviction that a great institution of learning cannot attain its full usefulness without a university press which can publish the writings of its scholars. To that object the special funds now in hand would contribute greatly. Yet it is not enough that certain subjects are provided for. Nor do these funds enable the University to do its own printing. It would be an advantage, and in the long run an economy, if we could collect fonts of type in different languages which a commercial printer can ill afford to buy for the text or notes to an occasional book which may come into his hands. Many of the books issued by a university press would more than pay for themselves. Almost all of them would pay a part of their cost, but some works of great scholarly value yield little and can be published in no other way. If selected by a judicious committee, the publications of such a press would contribute much to the credit of the University, and, what is more important, would stimulate productive scholarship which still lags behind in America. Neither the initial cost of such a press



nor the expense of maintenance is very large, but an endowment is absolutely essential if it is to be established. A committee has been appointed to consider the subject and ascertain whether the funds can be procured.

One word about the form of gifts that will ensure the greatest usefulness. Sometimes benefactors encumber their funds with provisions too inelastic in their application. The object may well be made precise, so that the intent shall be strictly observed; but the best means of attaining that object may vary in the course of time. Permanent funds endure into an indefinite future, and it is not wise to try to be wiser than all posterity. The details of application for the object named may often be left to the sagacity of those who will come hereafter.

In a brief annual report it is impossible even to touch upon all the manifold activities of the University. It is better to confine one's remarks to the matters of most common interest, without intending to imply that other things are of less importance. Nothing has, therefore, been said here of many of our great departments, such as the Observatory, the Arboretum, the Bussey Institution, the Museums, and the laboratories. For these, and for more detailed information about the different Faculties and Schools, the Overseers and friends of the University are respectfully referred to the reports of the Deans and Directors which are submitted and printed herewith.

A. LAWRENCE LOWELL, *President.*

## APPENDIX TO PRESIDENT'S REPORT

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### I

#### NEW REQUIREMENTS FOR DEGREES IN THE DIVINITY SCHOOL

##### DEGREE OF BACHELOR OF DIVINITY

To be admitted as a candidate for the degree of Bachelor of Divinity a student must be a graduate of an approved college. He must present, with evidence of graduation, a certified record of his studies and testimonials of character.

The conditions on which the degree is conferred are: —

1. The completion of three years of theological study.\*
2. The passing of satisfactory examinations in the following subjects: —
  - (a) The Religion of Israel, with Judaism to the second century A.D.
  - (b) Early Christianity, as it appears in the New Testament and the writings of the subapostolic age, with the environing religious conditions in the Greek and Roman world.
  - (c) The History of Christianity, particularly the history of thought, and of the religious life, corporate and individual.
  - (d) The History of Religions, especially the religions of civilized peoples.
  - (e) Systematic Theology.
  - (f) The Work of the Minister, including Social Ethics.

In these examinations the candidate will be expected to show that he possesses an adequate knowledge of the fundamental branches of theological study and the ability to apply his knowledge.

3. Satisfactory examinations in whatever other studies have been pursued as part of the candidate's professional education, whether more advanced studies in the fields specified above or studies in other subjects. To this end each student will present at the beginning of his last half-year a detailed account of his studies, including the courses he has taken and his reading in connection with them.

The examinations for the degree will be held at the end of the third year, and will be partly in writing, partly oral. To be admitted to them the candidate must have passed satisfactorily in the courses he has taken

\* A student who enters the School at the beginning of the second half-year may, by special vote of the Faculty after two years of residence, be allowed to present himself for the Bachelor's examination at the end of two and one half years of residence.

in the School. Candidates who pass the examinations with distinction may be recommended for the degree *cum laude*.

Instructors may employ such means of satisfying themselves of the progress of students in their courses as seem to them advisable, — by examinations, theses, written reports, conferences, etc., — reporting the results to the Dean in writing at the end of each half-year.

It is requested that, in the final report on the course, the instructor expresses not merely his judgment of the student's performance, but his impression of his quality.

#### ADVANCED STANDING

Students qualified for admission to candidacy for the degree in this School, who have studied in an approved theological school, may be admitted to advanced standing. Applicants for advanced standing must present a complete record of their previous studies.

Graduates of other theological schools having a three years' course of study may be admitted to third-year standing, and may receive the degree of Bachelor of Divinity on passing examinations in the prescribed fields specified above and in the other professional studies they have pursued here or elsewhere.

#### UNCLASSIFIED STUDENTS

Students admitted from other theological schools as candidates for the degree of Bachelor of Divinity, when they cannot be assigned immediately to a class, may be temporarily registered as unclassified students. Qualified persons who are admitted to pursue special or partial studies in the School will be designated in the same way.

#### STUDIES

On or before the second Monday of each academic year, every student shall submit to the Committee on Studies for its approval a plan of studies for the ensuing year. At the beginning of the second year, along with the plan for the year, shall be presented also a provisional plan for the rest of the course.

It is advised that students take introductory courses in the subjects designated by the letters (a), (b), (c), and (d), above (Religion of Israel, Early Christianity, Church History, History of Religions), also in Homiletics, Social Ethics, and the Philosophical Basis of Theology (Theism), as early as possible; they will thus pursue other studies with greater profit and have more freedom of choice in subsequent years. It is recommended, further, that Systematic Theology be not begun before the second year, and that it be preceded, if possible, by the History of Christian Thought.

The number and variety of the courses offered by the Faculty of Divinity and in the Andover Theological Seminary give students large opportunity to pursue more advanced studies, either concentrated in one or more subjects or distributed over several fields according to individual preference or plans. Many courses that may profitably be taken by theological students are offered by the Faculty of Arts and Sciences. The titles of some such courses are included under the head of "Allied Courses" in the list below. Fuller information about them will be found in the announcements of that Faculty.

### DEGREE OF MASTER OF DIVINITY

To be admitted as a candidate for the degree of Master of Divinity a student must present the same testimonials of character as are required for the degree of Bachelor of Divinity, must be a graduate of an approved college and of a theological school having a three years' course of study, or give evidence, by examination or otherwise, of equivalent attainment. Knowledge of Greek is required, except in the case of candidates in Practical Theology, of whom proficiency in modern languages may be accepted instead. The candidate's ability to make effective use of Latin and German for the purpose of his studies will be determined by examination within the first two weeks of the term.

The requirements for the degree can ordinarily be fulfilled by one year wholly devoted to advanced theological study; but candidates whose preparation for the studies they propose to undertake proves to be insufficient, or who for any reason are unable to give all their time to their studies, may need a proportionally longer period.

A candidate's studies must fall primarily in one of the main fields of theological study, but may include subsidiary studies in other fields. The plan of study must be coherent, and the studies comprised in it of advanced grade, ordinarily including one research, or seminary, course, and must be approved beforehand by the Faculty as affording proper preparation for the degree. Each candidate will be under the direction of a member of the Faculty in the department in which his work principally lies. In courses in which a mid-year examination is held, the candidate will be expected to pass this with high credit.

The examination for the degree will be in the subjects of the candidate's studies, rather than in the particular courses he has heard, and will include, besides such written tests as may be prescribed in each case, an oral examination before the Faculty or a committee appointed for the purpose.

### DEGREES OF MASTER OF ARTS AND DOCTOR OF PHILOSOPHY

In special cases students in the Divinity School may, with the approval of the Faculty, be candidates for the degree of Master of Arts and of Doctor of Philosophy. These degrees are administered by the Faculty of Arts and Sciences, and the conditions will be found in the announcement of the Graduate School of Arts and Sciences. A candidate for the degree of Master of Arts cannot at the same time be registered as a candidate for a degree in Divinity.

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## II

### NEW REQUIREMENT FOR THE BACHELOR'S DEGREE IN HISTORY, GOVERNMENT, AND ECONOMICS

1. That the Division of History, Government, and Economics be authorized to require of all students whose field of concentration lies in this Division, in addition to the present requirements stated in terms of courses for the Bachelor's degree, a special final examination upon each

student's field of concentration; and that the passing of this examination shall be necessary in order to fulfil the requirements for concentration in this Division.

2. That students who pass this special examination may be excused from the regular final examinations in such courses of their last year as fall within the Division of History, Government, and Economics in the same way that candidates for distinction who pass a public test may now be excused under the rules of the Faculty.

3. That this requirement go into effect with the class entering in 1913.

4. That the Division of History, Government, and Economics submit for the sanction of the Faculty the detailed rules for the final examinations and such a detailed scheme of tutorial assistance as may be adopted before these are put into effect by the Division.

#### OUTLINE OF THE PLAN FOR A GENERAL FINAL EXAMINATION IN THE DIVISION OF HISTORY, GOVERNMENT, AND ECONOMICS

I. GENERAL EXAMINATION. — In addition to the requirements now established in terms of courses for the degrees of Bachelor of Arts and Bachelor of Science, a general examination shall be taken as part of the requirement for the Bachelor's degree by all students concentrating within the Division of History, Government, and Economics. This examination will be held at or about the close of a student's final year of preparation, provision being made for those students who take their degree in the middle of the year.

(a) *Method of Examination.* — The examination will be both written and oral. The written examination will consist of not less than two three-hour papers. The first of these will be designed to test the general attainment of candidates in subjects within this Division; the second paper will be of a more special character. With the approval of the Examiners, however, candidates will be allowed to submit a suitable thesis in lieu of this special written examination or part thereof. The oral examination will be taken in the period intervening between the first written paper and the close of the college year.

(b) *Scope of the Examination.* — The examinations provided in the foregoing section will cover the entire work of each candidate in this Division and, specifically, a field of study (*e. g.*, American history and government, or international law and diplomatic history, or accounting and corporations) represented approximately by three full courses, together with outside reading selected in connection with, or supplementary to, these courses. Suitable fields of study for purposes of this examination will be mapped out by the Division or by the Departments composing it; but provision will also be made for the approval of other suitable fields selected by candidates themselves.

(c) *Conduct of the Examination.* — The administration of the examinations will be placed in the hands of a Division committee of three, approved by the President. Members of this committee will be designated

as Examiners and will be relieved from all their regular instruction for the second half-year or from its equivalent, except instruction in courses of research. The Division considers it a necessary part of the plan that the regular instruction from which the members of the committee are thus relieved be replaced both in quantity and quality. Examiners should be appointed for a three-year term, and the addition of an outside examiner will be arranged for, whenever practicable. The Examiners will prepare all questions for the written examinations, will read examination books, and will conduct the oral examination.

II. PREPARATION OF STUDENTS FOR THE GENERAL EXAMINATION. — Students concentrating in the Division will be encouraged to select their own fields of study, and, so far as possible, to carry forward their own preparation, including a mastery of the reading selected in courses or supplementary to them. But tutorial assistance also will be provided for each student who intends to take the general examination. This assistance will be given by Tutors under the direction of the Division. The work of these Tutors will be to guide students in their respective fields of study, to assist them in coördinating the knowledge which they have derived from different courses, and to stimulate in them the reading habit. Tutors will meet the students in small groups and at individual conferences. The Examiners will be authorized, however, to exempt from such conferences, upon the recommendation of a member of the Division, good students who are pursuing special work under his direction.

## COURSES OF INSTRUCTION GIVEN IN 1911-12

## GROUP I

## Semitic Languages and History

*For Undergraduates and Graduates:—*

- 1<sup>1</sup>. Professor JEWETT.—Hebrew. Selections from the prose narratives of the Old Testament. 2 So., 1 Fr., 3 And. Total 6.
- 2<sup>2</sup>. Professor LYON.—Hebrew (second course). Syntax. Extensive reading in the Old Testament. 2 So., 2 Fr., 1 And. Total 5.
4. Professor LYON.—The Old Testament, with special reference to the history and the literature of Israel. 9 Se., 17 Ju., 6 So., 5 F., 1 And. Total 33.
- A5. Professor ARNOLD.—Introduction to the Old Testament. History of the text; the formation of the Canon; historico-critical study of the origin, form, and contents of the several books. 1 Se., 4 Di., 4 And. Total 9.
- 12 <sup>1</sup>/<sub>2</sub>. Professor LYON.—History of Babylonia and Assyria. 1 Gr., 4 Ju. Total 5.

*Primarily for Graduates:—*

- A4 <sup>1</sup>/<sub>2</sub>. Professor ARNOLD.—History of Israel. 1 Se., 1 Di., 7 And. Total 9.
- †11. Professor LYON.—Assyrian (second course). The Laws of Hammurabi; early historical records; mythological poems. 1 Gr. Total 1.
- †14. Professor JEWETT.—Arabic (second course). Selections from the Qorān, the Hadith, and classical writers on geography and history. 1 Gr., 1 So. Total 2.
18. Professor JEWETT.—Classical Aramaic (Syriac). Selections from the Peshitto; Syriac prose of the classical period. 1 Di. Total 1.

*Course of Research*

- A20. Professor ARNOLD.—Old Testament Problems. 1 Gr. Total 1.

## Egyptology

*For Undergraduates and Graduates:—*

- 3 <sup>1</sup>/<sub>2</sub>. Asst. Professor REISNER.—History of Egypt. 24 Se., 24 Ju., 7 So., 2 Fr., 1 Sp. Total 58.

*Primarily for Graduates:—*

- 6 <sup>1</sup>/<sub>2</sub>. Asst. Professor REISNER.—Archaeological Field Work. Theory and practice of archaeological field work as a branch of historical research. 3 Gr., 1 Se. Total 4.

## Indic Philology

*For Undergraduates and Graduates:—*

- 1a <sup>1</sup>/<sub>2</sub>. Professor LANMAN.—Elementary Sanskrit. 4 Gr. Total 4.
- 1b <sup>1</sup>/<sub>2</sub>. Professor LANMAN.—Elementary Sanskrit (continued). Bhagavad-Gītā. Upanishads. 3 Gr. Total 3.

*Primarily for Graduates:—*

- 2 <sup>1</sup>/<sub>hf</sub>. Professor LANMAN. — Advanced Sanskrit. Mahā-Bhārata (rapid reading). Book 2 of the oldest Beast-fables of Kashmir, Tantra-ākhyāyika. 1 Gr. Total 1.
- 3 <sup>1</sup>/<sub>hf</sub>. Professor LANMAN. — Advanced Sanskrit (continued). Epigrams of Bhartri-hari with the native commentary. Selections from Vedas and Brāhmanas. 1 Gr. Total 1.

## The Classics

*Primarily for Undergraduates:—*

## GREEK

- G. Dr. K. K. SMITH. — Course for Beginners. 1 Gr., 3 So., 9 Fr., 1 Sp. Total 14.
- A. Mr. MILLER. — Greek Literature. Homer, Odyssey; Euripides and Aristophanes. 3 Ju., 3 So., 16 Fr., 1 uC. Total 23.
- B. Asst. Professor C. N. JACKSON, Dr. Post, and Dr. LITCHFIELD. — Greek Literature. Plato; Lysias; Elegiac, Iambic, and Lyric Poets; Euripides. Lectures on the History of Greek Literature. 4 Ju., 1 So., 26 Fr. Total 31.
- E <sup>1</sup>/<sub>hf</sub>. Dr. WEBB. — Greek Prose Composition (first course). 1 Ju., 3 So., 2 Fr., 1 uC. Total 7.
- 1a <sup>1</sup>/<sub>hf</sub>. Dr. LITCHFIELD. — Greek Literature. The Period of Athenian Supremacy. Herodotus; Aeschylus; Plutarch. 2 Fr., 1 uC. Total 3.
- 1b <sup>1</sup>/<sub>hf</sub>. Dr. Post. — Greek Literature. The Period of Athenian Supremacy. Thucydides; Aristophanes; Sophocles. 4 Fr., 1 uC. Total 5.
2. Professor C. P. PARKER and Asst. Professor C. N. JACKSON. — Greek Literature. Aristophanes; Thucydides; Aeschylus; Sophocles. 2 Se., 1 Ju., 5 So. Total 8.
- 3 <sup>1</sup>/<sub>hf</sub>. Asst. Professor CHASE. — Greek Prose Composition (second course). 4 Ju., 1 Fr., 1 uC. Total 6.

## LATIN

- A. Mr. MILLER. — Latin Literature. Cicero (selected speeches). Virgil. 1 Ju., 1 So., 5 Fr., 1 Sp., 1 uC. Total 9.
- B. Professor E. K. RAND, Drs. WEBB, K. K. SMITH, LITCHFIELD, and Mr. MILLER. — Latin Literature. Livy; Terence; Horace. 1 Ju., 1 So., 99 Fr., 1 uC. Total 102.
- E <sup>1</sup>/<sub>hf</sub>. Dr. LITCHFIELD. — Latin Composition (first course). Translation of English Narrative. 1 Se., 1 Ju., 4 So., 4 Fr. Total 10.
1. Professor CLIFFORD H. MOORE and Dr. WEBB. — Latin Literature. Tacitus; Catullus; Horace. 2 Se., 2 Ju., 15 So., 5 Fr. Total 24.
- 2a <sup>1</sup>/<sub>hf</sub>. Dr. LITCHFIELD. — Latin Literature. General View of Latin Poetry. 4 So. Total 4.
- 2b <sup>1</sup>/<sub>hf</sub>. Dr. WEBB. — Latin Literature. Introduction to Latin Prose Literature. Tacitus. 1 Ju., 2 So., 1 Fr. Total 4.
- 3 <sup>1</sup>/<sub>hf</sub>. Dr. K. K. SMITH. — Latin Composition (second course). 4 Ju. Total 4.



*For Undergraduates and Graduates :—*

## GREEK

6. Professor WEIR SMYTH and Dr. POST. — Greek Literature. Demosthenes; Aeschines; Aeschylus; Sophocles; Aristophanes.  
1 Gr., 1 Se., 10 Ju., 1 So., 1 Fr., 1 uC. Total 15.
- 7 *hf.* Asst. Professor C. N. JACKSON. — Greek Prose Composition (third course).  
4 Gr., 4 Se., 1 Ju. Total 9.
8. Professor C. P. PARKER. — Plato; Aristotle. Survey of Greek Philosophy from Thales to Aristotle.  
1 Gr., 5 Se. Total 6.
15. Professor WEIR SMYTH and Dr. LITCHFIELD. — Greek Literature. The Homeric Poems, with studies of their literary influence. 2 Gr. Total 2.

## LATIN

6. Professor A. A. HOWARD. — Latin Literature. Suetonius; Pliny; Juvenal; Martial.  
4 Gr., 4 Se., 12 Ju., 1 uC. Total 21.
- 7 *hf.* Professor C. P. PARKER. — Latin Composition (third course).  
4 Gr., 3 Se., 1 Ju. Total 8.
8. Professors CLIFFORD H. MOORE and E. K. RAND. — Latin Literature. Cicero; Lucretius; Plautus. 2 Gr., 6 Se., 2 Ju., 1 Fr., 1 uC. Total 12.
10. Professor CLIFFORD H. MOORE. — The Life and Thought of the Romans. Illustrated in the Monuments and in the Literature.  
6 Se., 15 Ju., 1 Fr. Total 22.
12. Professor A. A. HOWARD. — History of Latin Literature to the middle of the Second Century.  
3 Gr., 1 Se. Total 4.

*Primarily for Graduates :—*

## CLASSICAL PHILOLOGY

- 25 *1/2 hf.* Asst. Professor C. N. JACKSON. — Introduction to the Interpretation and Criticism of Classical Authors. History of Classical Studies.  
3 Gr. Total 3.
- †37 *1/2 hf.* Professor WEIR SMYTH. — Greek Lyric Poetry; The Elegy. With especial attention to the History of the Elegy. 4 Gr., 1 R. Total 5.
- †38 *1/2 hf.* Professor WEIR SMYTH. — Pindar. 8 Gr., 2 R., 1 Instr. Total 11.
- 43 *1/2 hf.* Dr. POST. — Sophocles. Three Plays of Sophocles.  
3 Gr., 2 Se., 1 Ju. Total 6.
- †40 *1/2 hf.* Professor WEIR SMYTH. — The Alexandrian Age. 2 Se., 1 R. Total 3.
- †59. Professor ROPES. — The Epistles of St. Paul. Selected portions.  
3 Di. Total 3.
- 47 *1/2 hf.* Professor A. A. HOWARD. — Terence. The Comedies of Terence.  
6 Gr. Total 6.
- 58 *1/2 hf.* Asst. Professor C. N. JACKSON. — The later Roman Epic.  
2 Gr., 1 Se. Total 3.

- 34 <sup>2</sup>/<sub>hf</sub>. Dr. K. K. SMITH. — Greek Grammar (Sounds and Inflections). Study of Dialectic Inscriptions. 2 Gr. Total 2.
- 28 <sup>2</sup>/<sub>hf</sub>. Professor A. A. HOWARD. — Latin Grammar (Syntax). 8 Gr. Total 8.
- 50 <sup>2</sup>/<sub>hf</sub>. Professor CLIFFORD H. MOORE. — Introduction to Latin Epigraphy. 6 Gr., 2 R., 1 Instr. Total 9.
- 49 <sup>1</sup>/<sub>hf</sub>. Professor E. K. RAND. — Latin Palaeography. Introduction to Latin Palaeography. 7 Gr. Total 7.
- 29 <sup>1</sup>/<sub>hf</sub>. Professor CLIFFORD H. MOORE. — The Religion and Worship of the Greeks. 7 Gr., 1 Di., 1 Instr. Total 9.

### 20. *The Seminary of Classical Philology*

Professors C. P. PARKER and E. K. RAND, Directors for 1911-12. — Training in philological criticism and research. Text-criticism and interpretation of Greek and Latin authors: for 1911-12, the Platonic Scholia and the Transmission of the text of Latin Authors in the Early Middle Ages. 5 Gr. Total 5.

### CLASSICAL ARCHAEOLOGY

*For Undergraduates and Graduates:—*

- 1a <sup>1</sup>/<sub>hf</sub>. Asst. Professor CHASE. — Greek Archaeology. 5 Gr., 8 Se., 6 Ju., 1 So., 1 Fr. Total 21.
- 1b <sup>2</sup>/<sub>hf</sub>. Asst. Professor CHASE. — Etruscan and Roman Archaeology. 3 Gr., 7 Se., 7 Ju., 2 So., 1 Sp. Total 20.

*Primarily for Graduates:—*

- 6 <sup>2</sup>/<sub>hf</sub>. Asst. Professor CHASE. — Greek Vases. 3 Gr., 1 Ju. Total 4.

### English

#### ENGLISH COMPOSITION

*Primarily for Undergraduates:—*

A. Professors BRIGGS and HURLBUT, and Asst. Professor GREENOUGH, Drs. HANFORD, LEACH, LONG, WHITMORE, and Messrs. FRENCH, HERSEY, LEWIS, M. McLEOD, C. A. MOORE, SAVAGE, SHEAHAN, SHIPHERD, and WITHINGTON. — Rhetoric and English Composition.

1 G.B., 2 Ju., 10 So., 495 Fr., 12 Sp., 8 uC. Total 528.

Of this number, 64 (1 Ju., 1 So., 61 Fr., 1 Sp.,) were relieved of the prescription of English at the end of the first half-year; 31 Fr., 1 uC., took the second half-year's work as an elective half-course.

D<sup>1-2</sup>/<sub>hf</sub>. Dr. WEBSTER, assisted by Messrs. O'CONOR and WITHINGTON. — English Composition.

1 Gr., 5 Se., 5 Ju., 34 So., 47 Fr., 2 uC. Total 94.

31. Dr. BERNBAUM. — English Composition.

1 Se., 13 So., 4 Fr., 1 Sp., 5 uC. Total 24.

22. Dr. MAYNARDIE, assisted by Mr. COVES. — English Composition.

1 Gr., 13 Se., 30 Ju., 14 So., 8 Fr., 2 Sp., 8 uC. Total 76.

18. Mr. STONE. — The Forms of Public Address.

15 Se., 30 Ju., 10 So., 1 Fr., 1 Sp., 2 uC. Total 59.

30 <sup>1</sup>/<sub>hf</sub>. Mr. STONE. — Debating. 1 Gr., 5 Se., 5 Ju., 1 So., 1 Fr., Total 18.

*For Undergraduates and Graduates:—*

12. Asst. Professor COPELAND.—English Composition.

7 Se., 15 Ju., 11 So., 1 Sp. Total 34.

57 <sup>1</sup>/<sub>2</sub>hf. Professor BLISS PERRY.—English Composition.

3 Gr., 1 Se., 2 Ju., 1 Sp., 1 Di. Total 8.

58 <sup>1</sup>/<sub>2</sub>hf. Professor WENDELL.—English Composition. 2 Se., 2 Ju., 1 So. Total 5.*Primarily for Graduates:—*

5. Professor BRIGGS.—English Composition (advanced course).

15 Gr., 6 Se., 7 Ju., 2 So., 1 Sp., 1 uC. Total 32.

47. Professor BAKER.—English Composition. The Technique of the Drama.

11 Gr., 4 Ju., 1 So., 2 Sp., 1 uC., 2 Ext. Total 21.

## ENGLISH LANGUAGE AND LITERATURE

*Primarily for Undergraduates:—*

28 hf. Professors BRIGGS, BLISS PERRY, KITTREDGE, BAKER, and NEILSON, and Dr. BERNBAUM.—History and Development of English Literature in outline. 58 Fr., 1 Sp., 1 uC. Total 60.

41. Professor WENDELL, assisted by Messrs. WITHINGTON and HUNT.—History of English Literature from the Elizabethan times to the present.

1 Gr., 7 Se., 31 Ju., 48 So., 3 Fr., 2 Sp., 6 uC. Total 98.

37 <sup>1</sup>/<sub>2</sub>hf. Dr. MAYNADIER.—The Story of King Arthur.

13 Se., 19 Ju., 26 So., 9 Fr., 1 Sp., 4 uC. Total 72.

*For Undergraduates and Graduates:—*3a <sup>1</sup>/<sub>2</sub>hf. Dr. WEBSTER.—Anglo-Saxon.

17 Gr., 5 Se., 1 Ju., 2 So., 1 Fr. Total 26.

1. Professors NEILSON and F. N. ROBINSON.—Chaucer.

21 Gr., 6 Se., 3 Ju., 1 So. Total 31.

2. Professor KITTREDGE.—Shakspeare.

16 Gr., 13 Se., 39 Ju., 17 So., 3 Fr., 1 Sp., 3 uC. Total 92.

11a <sup>1</sup>/<sub>2</sub>hf. Professor NEILSON.—Bacon.

3 Gr., 7 Se., 15 Ju., 7 So., 5 Fr., 1 uC. Total 38.

11b <sup>1</sup>/<sub>2</sub>hf. Professor NEILSON.—Milton.

2 Gr., 5 Se., 12 Ju., 6 So., 4 Fr., 1 uC. Total 30.

61 <sup>1</sup>/<sub>2</sub>hf. Asst. Professor GREENOUGH.—Eighteenth Century Periodicals, particularly the Tatler, Spectator, Rambler, and Adventurer.

6 Gr., 8 Se., 7 Ju., 3 So., 7 Fr., 2 uC. Total 33.

53 <sup>1</sup>/<sub>2</sub>hf. Asst. Professor COPELAND, assisted by Mr. SHEAHAN.—Scott.

3 Gr., 51 Se., 66 Ju., 40 So., 15 Fr., 2 Sp., 3 uC., 1 Law. Total 181.

16 <sup>1</sup>/<sub>2</sub>hf. Professor BRIGGS.—History and Principles of English Versification.

9 Gr., 3 Se., 8 Ju., 1 So., 3 Fr., 1 Sp., 1 uC. Total 26.

*Primarily for Graduates:—*3b <sup>1</sup>/<sub>2</sub>hf. Professors KITTREDGE and F. N. ROBINSON.—Anglo-Saxon. Bëowulf.

20 Gr., 4 Se. Total 24.

- 25 <sup>1</sup>/<sub>2</sub>hf. Professor F. N. ROBINSON. — Anglo-Saxon Poetry. 6 Gr. Total 6.  
Comparative Literature 25 <sup>1</sup>/<sub>2</sub>hf. (See Comparative Literature, p. 43.)
- 44 <sup>1</sup>/<sub>2</sub>. Professor KITTREDGE. — Chaucer. Study of special topics.  
10 Gr. Total 10.
14. Professor BAKER. — The Drama in England from the Miracle Plays to the Closing of the Theatres.  
32 Gr., 6 Se., 4 Ju., 1 So., 1 Sp., 2 uC. Total 46.
39. Professor BAKER. — The Drama in England from 1642 to 1900.  
16 Gr., 14 Se., 9 Ju., 3 So., 4 Sp., 2 uC., 1 Law. Total 49.
- 62 <sup>1</sup>/<sub>2</sub>hf. Asst. Professor GREENOUGH. — The Character, with some Consideration of Related Forms.  
8 Gr., 4 Se. Total 12.
- 56 <sup>1</sup>/<sub>2</sub>hf. Dr. BERNBAUM. — Eighteenth Century Sentimentalists and their Opponents.  
10 Gr., 1 G.S., 1 Se., 1 Ju., 1 uC. Total 14.
59. Professor BLISS PERRY. — The English Critical Essay.  
15 Gr., 1 Fr., 1 Sp. Total 17.
- 24 <sup>1</sup>/<sub>2</sub>hf. Professor NEILSON. — Studies in the Poets of the Romantic Period.  
37 Gr., 4 Se., 3 Ju., 3 So., 2 Fr., 1 Sp. Total 50.
- 29 <sup>1</sup>/<sub>2</sub>hf. Dr. MAYNADIER. — The English Novel.  
8 Gr., 2 Se., 4 Ju., 2 So., 1 Fr. Total 12.
- 33 <sup>1</sup>/<sub>2</sub>hf. Professor WENDELL. — The Literary History of America.  
8 Gr., 4 Se. Total 12.
- 63 <sup>1</sup>/<sub>2</sub>hf. Professor BLISS PERRY. — Emerson  
16 Gr., 31 Se., 26 Ju., 3 So., 1 Sp., 1 uC., 1 Di. Total 79.

#### *Courses of Special Study*

20. The instructors in English held themselves ready to assist and advise competent Graduate Students who might propose plans of special study in the language or literature of the periods or in the topics mentioned below. Such plans, however, must in each case have met the approval of the Department.
- a. Professor F. N. ROBINSON. — Anglo-Saxon. 1 Gr. Total 1.
- c. Professor NEILSON. — Modern English Literature. 4 Gr. Total 4.  
Professor GREENOUGH. — Modern English Literature. 1 Gr. Total 1.
- d. Professor BAKER. — The English Drama: its history, and its relation to Continental Drama. 4 Gr. Total 4.

#### **Public Speaking**

##### *Primarily for Undergraduates: —*

- A. Mr. PERRET. — Voice Training, with Practice in Speaking and Reading.  
4 Ju., 1 So., 16 Fr., 1 uC. Total 22.
- 2 <sup>1</sup>/<sub>2</sub>hf. Asst. Professor WINTER, and Mr. BUNKER. — Masterpieces of Public Discourse. (a) Platform delivery — principles and practice. Selections from recent speeches. (b) Study of representative speeches, and practice in oral discussion. 8 Se., 8 Ju., 4 So., 5 Fr., 1 uC. Total 26.

3*h*f. Asst. Professor WINTER, and Messrs. PERRET and PORTER.—Public Speaking. Practice in the delivery of original speeches, both prepared and extemporaneous. 23 Se., 40 Ju., 25 So., 3 Fr., 1 Sp. Total 92.

4*h*f. Asst. Professor WINTER and Messrs. PERRET and BUNKER.—Vocal Interpretation of Dramatic Literature. Interpretative study, and training in speech and action. 1 Se., 3 Ju., 2 So., 2 Fr., 1 uC., 1 Ext. Total 10.

F<sup>2</sup>. Asst. Professor WINTER.—Advanced Training in Platform Delivery. 2 Gr., 3 Se., 2 Law, 1 Me., 1 Instr. Total 9.

### Germanic Languages and Literatures

#### GERMAN

##### *Primarily for Undergraduates:—*

A. Asst. Professor BIERWIRTH, Drs. EISERHARDT and PETTENGILL, and Messrs. IBERSHOFF, HERRICK, and A. E. RAND.—Elementary Course.

8 Gr., 5 Se., 7 Ju., 10 So., 186 Fr., 5 Sp., 8 uC., 4 Di. Total 233.

B. Mr. HERRICK.—Elementary Course (counting as two courses).

1 Se., 1 Jr., 1 So., 16 Fr., 2 Sp., 3 uC. Total 24.

C. Asst. Professor W. G. HOWARD, Drs. WEBER and EISERHARDT.—German Prose and Poetry. 1 Ju., 2 So., 39 Fr., 1 uC. Total 43.

1a. Drs. LIEDER and PETTENGILL.—German Prose and Poetry.

1 Se., 2 Ju., 37 So., 17 Fr., 3 uC. Total 60.

1b. Dr. WEBER.—German Prose. Subjects in History and Biography.

2 Gr., 1 Se., 11 Ju., 12 So., 16 Fr., 1 Sp., 1 uC. Total 44.

1c. Dr. LIEDER.—German Scientific Prose. Subjects in Natural Science.

1 Gr., 2 Se., 14 Ju., 12 So., 14 Fr., 1 uC. Total 44.

F<sup>1</sup>*h*f. Mr. HERRICK.—Practice in speaking and writing German (first course).

6 Se., 9 Ju., 7 So., 15 Fr., 1 Sp., 1 uC. Total 39.

H<sup>2</sup>*h*f. Dr. EISERHARDT.—Practice in speaking and writing German (second course).

4 Se., 7 Ju., 7 So., 10 Fr., 2 uC. Total 30.

2a. Professor VON JAGEMANN and Dr. EISERHARDT.—Introduction to German Literature of the Eighteenth and Nineteenth Centuries. Lessing, Goethe, and Schiller. German Ballads and Lyrics.

10 Ju., 6 So., 26 Fr., 1 Sp., 2 uC. Total 45.

2b. Professor H. S. WHITE and Dr. LIEDER.—Introduction to German Literature of the Eighteenth and Nineteenth Centuries. Lessing, Goethe, and Schiller. German Ballads and Lyrics.

3 Se., 10 Ju., 16 So., 57 Fr., 1 uC. Total 87.

2c. Professor H. S. WHITE.—German Prose. Subjects in German History. Freytag; Below; Kugler; Biedermann; Tombo.

4 Ju., 9 So., 22 Fr., 1 uC. Total 36.

3. Asst. Professor BIERWIRTH.—Schiller and his Time. *Der Dreissigjährige Krieg*; *Wallenstein*; *Maria Stuart*; *Die Jungfrau von Orleans*; *Die Braut von Messina*; *Gedichte*.

1 Gr., 1 Se., 1 Ju., 13 So., 6 Fr., 2 uC. Total 24.

4. Professor WALZ and Dr. WEBER.—Goethe and his Time. Works of the Storm and Stress Period; Autobiographical Works; Poems; Egmont; Iphigenie; Tasso; Faust.

1 Gr., 6 Se., 13 Ju., 12 So., 4 Fr., 2 uC. Total 38.

- 25 <sup>1</sup>/<sub>hf</sub>. Professor FRANCKE, assisted by Mr. GROSSMANN.—History of German Literature in outline. 29 Se., 27 Ju., 15 So., 10 Fr., 1 Sp. Total 82.

*For Undergraduates and Graduates:—*

- 18 <sup>1</sup>/<sub>hf</sub>. Dr. WEBER.—German Grammar and practice in writing German (advanced course). 2 Gr., 1 Ju., 2 So., 1 uC., 1 Law. Total 7.

8. Professor WALZ and Dr. WEBER.—German Literature in the Twelfth and Thirteenth Centuries. Nibelungenlied; Kudrun; Hartmann; Wolfram; Walther von der Vogelweide. Translation into modern German.

5 Gr., 1 Ju., 1 So. Total 7.

- 6 <sup>1</sup>/<sub>hf</sub>. Professor FRANCKE.—History of German Culture from the End of the Thirty Years' War to the Death of Frederick the Great.

9 Gr., 2 Se., 6 Ju., 5 So., 2 Fr., 1 Sp. Total 25.

Comparative Literature 8 <sup>3</sup>/<sub>hf</sub>. (See Comparative Literature, p. 48.)

- 26a <sup>1</sup>/<sub>hf</sub>. Asst. Professor W. G. HOWARD.—German Literature in the first half of the Nineteenth Century. Kleist; Uhland; Heine.

4 Gr., 4 Se., 7 Ju., 2 uC. Total 17.

- 26b <sup>3</sup>/<sub>hf</sub>. Asst. Professor W. G. HOWARD.—German Literature in the second half of the Nineteenth Century. The Development of the Novel and the Drama.

5 Gr., 2 Se., 3 Ju., 2 So., 1 uC. Total 18.

29. Professor H. S. WHITE.—The Life and Writings of Richard Wagner. Selections from the texts of Richard Wagner's musical dramas, with some study of the legendary background, and with illustrations and elucidations from Wagner's other writings.

1 Gr., 7 Se., 8 Ju., 2 So., 3 Fr. Total 21.

- 38 <sup>1</sup>/<sub>hf</sub>. Dr. WEBER.—The German Novel in the Nineteenth Century.

3 Gr., 3 So., 1 uC. Total 7.

*Primarily for Graduates:—*

- ‡9 <sup>1</sup>/<sub>hf</sub>. Professor FRANCKE.—German Religious Sculpture in the Middle Ages, with demonstrations in the Germanic Museum.

1 Gr., 1 Ju., 4 R. Total 6.

‡Comparative Literature 28 <sup>1</sup>/<sub>hf</sub>. (See Comparative Literature, p. 48.)

- 36 <sup>3</sup>/<sub>hf</sub>. Asst. Professor BIERWIRTH.—German Lyric Poetry since 1870.

5 Gr., 1 So., 3 R. Total 9.

- ‡12a <sup>1</sup>/<sub>hf</sub>. Professor VON JAGEMANN.—Gothic. Introduction to the Study of Germanic Philology. General Introduction; phonology.

20 Gr., 7 R. Total 27.

- ‡12b <sup>3</sup>/<sub>hf</sub>. Professor VON JAGEMANN.—Introduction to the Study of Germanic Philology (continued). Morphology; etymology. 6 Gr., 3 R. Total 9.

- ‡15 <sup>3</sup>/<sub>hf</sub>. Professor WALZ.—Old High German.

6 Gr., 1 R. Total 7.

- ‡21. Professor VON JAGEMANN.—History of the German Language.

5 Gr., 1 R. Total 6.

*Seminary Courses*

‡20a <sup>1</sup>/<sub>2</sub>f. Asst. Professor W. G. HOWARD. — Lessing's Laokoon. 5 Gr. Total 5.

‡20b <sup>3</sup>/<sub>4</sub>f. Professor FRANCKE. — Schiller's Philosophical Poems.

2 Gr., 1 Sp. Total 3.

## SCANDINAVIAN

*For Undergraduates and Graduates :*

1 <sup>1</sup>/<sub>2</sub>f. Professor SCHOFIELD. — Dano-Norwegian. An introduction to the study of the Danish and Norwegian languages and literatures. Practice in the spoken language. Reading of selected texts.

4 Gr., 1 Se., 1 Ju., 2 So., 1 Sp. Total 9.

*Primarily for Graduates :*

5<sup>2</sup>. Dr. LEACH. — History of the Scandinavian Languages.

3 Gr., 1 Instr. Total 4.

## Romance Languages and Literatures

## FRENCH

*Primarily for Undergraduates :—*

A. Dr. WHITTEM, Drs. HAWKINS and WILKINS, and Messrs. LINCOLN, WESTON, and CORLEY. — Elementary Course. French prose and composition.

17 Gr., 1 G.S., 3 Se., 10 Ju., 7 So., 85 Fr., 6 Sp., 10 uC., 2 And. Total 141.

1. Asst. Professor BABBITT, Drs. HAWKINS and WILKINS, and Messrs. RAICHE and LINCOLN. — French Prose, historical and general. Translation from French into English. 9 Ju., 48 So., 49 Fr., 1 Sp., 11 uC. Total 118.

2c. Asst. Professor POTTER, Drs. HAWKINS and WHITTEM, and Messrs. LINCOLN, WESTON, and CORLEY. — French Prose and Poetry. Corneille; Racine; Molière; Victor Hugo; Alfred de Musset; Balzac; Mérimée; Flaubert; Daudet; Loti; Zola. Composition.

4 Se., 9 Ju., 34 So., 86 Fr., 2 Sp., 3 uC. Total 138.

2a. Asst. Professors WRIGHT and ALLARD, and Messrs. MERCIER, RAICHE, WESTON, and ATKIN. — French Prose and Poetry. Corneille; Racine; Molière; Victor Hugo; Balzac; George Sand; Alfred de Musset; Rostand. Composition. 1 Gr., 4 Ju., 39 So., 118 Fr., 1 Sp., 1 uC. Total 164.

3. Mr. RAICHE. — French Composition (elementary course).

2 Se., 8 Ju., 28 So., 11 Fr. Total 49.

4 <sup>1</sup>/<sub>2</sub>f. Mr. MERCIER. — French Composition (intermediate course).

1 Gr., 6 Se., 10 Ju., 16 So., 4 Fr., 1 Sp. Total 38.

5 <sup>3</sup>/<sub>4</sub>f. Mr. MERCIER. — French Composition (advanced course).

1 Gr., 3 Se., 6 Ju., 12 So., 4 Fr., 1 uC. Total 27.

*For Undergraduates and Graduates :—*

6. Professors GRANDGENT and FORD, Asst. Professor ALLARD, and Mr. MERCIER. — General View of French Literature.

2 Gr., 1 G.S., 5 Se., 18 Ju., 35 So., 5 Fr., 1 uC. Total 67.

8. Asst. Professor ALLARD. — French Literature in the Eighteenth Century.

2 Gr., 4 Se., 4 Ju., 4 So., 3 Fr. Total 17.

9. Asst. Professor WRIGHT. — French Literature in the Seventeenth Century.  
5 Gr., 3 Se., 1 So. Total 9.

17 hf. Asst. Professor BABBITT. — Literary Criticism in France, with special reference to the Nineteenth Century. 6 Gr., 2 Ju. Total 8.

Comparative Literature 9. (See Comparative Literature, p. 43.)

*Primarily for Graduates: —*

‡12. Professor SHELDON. — Old French Literature. 4 Gr., 1 R. Total 5.

21 hf. Asst. Professor WRIGHT. — French Prose in the Sixteenth Century.  
Rabelais; Montaigne. 9 Gr. Total 9.

24 hf. Asst. Professor ALLARD. — Studies in the French Drama of the Nineteenth Century. 4 Gr. Total 4.

ITALIAN

*Primarily for Undergraduates: —*

1. Dr. WILKINS and Mr. WESTON. — Italian Grammar. Reading and Composition. Modern Italian stories and plays.

1 Gr., 13 Ju., 6 So., 15 Fr., 2 uC. Total 37.

*For Undergraduates and Graduates: —*

4 hf. Dr. WILKINS. — General View of Italian Literature.

5 Gr., 3 Se., 3 Ju., 1 So., 1 Fr. Total 13.

2. Professor FORD and Mr. WESTON. — Italian Literature of the Fifteenth and Sixteenth Centuries. Torquato Tasso; Ariosto; Machiavelli; Benvenuto Cellini. 6 Gr., 3 Se., 2 Ju., 1 So. Total 12.

10. Professor GRANDGENT. — The Works of Dante, particularly the Vita Nuova and the Divine Comedy. 7 Gr., 1 Se., 2 Ju. Total 10.

*Primarily for Graduates: —*

3. Professor GRANDGENT and Dr. WILKINS. — Italian Literature of the Thirteenth and Fourteenth Centuries. Selections from Boccaccio and Petrarch. Early Italian. Monaci's Crestomazia italiana dei primi secoli.

9 Gr., 1 Ju. Total 10.

Comparative Literature 17 hf. (See Comparative Literature, p. 43.)

SPANISH

*Primarily for Undergraduates: —*

1. Asst. Professor POTTER, Dr. WHITEM, and Messrs. LINCOLN, ATKIN, and RIVERA. — Spanish Grammar, reading, and composition. Modern Spanish Novels and Plays. 1 Se., 37 Ju., 49 So., 35 Fr., 2 uC. Total 124.

7 hf. Dr. WHITEM. — Spanish Composition (elementary course).

1 G.B., 6 Ju., 2 So., 1 Fr. Total 10.

*For Undergraduates and Graduates: —*

8 hf. Mr. RIVERA. — Spanish Composition and Conversation (advanced course).

2 Se., 2 Ju., 2 So. Total 6.

5. Professor FORD and Dr. WHITEM. — Spanish Prose and Poetry of the Eighteenth and Nineteenth Centuries.

7 Gr., 4 Se., 14 Ju., 12 So., 4 Fr. Total 41.



6 <sup>1</sup>/<sub>2</sub>f. Professor E. C. HILLS (Colorado College). — Spanish American Poetry.  
4 Gr., 1 Se., 7 Ju., 1 So. Total 18.

*Primarily for Graduates:—*

Comparative Literature 17 <sup>1</sup>/<sub>2</sub>f. (See Comparative Literature, p. 48.)

#### ROMANCE PHILOLOGY

*Primarily for Graduates:—*

8. Professor SHELDON. — Old French. Phonology and inflections. The oldest texts. *La Chanson de Roland*; *Chrétien de Troyes*; *Aucassin et Nicolette*.  
21 Gr., 1 So. Total 22.

5 <sup>1</sup>/<sub>2</sub>f. Professor GRANDGENT. — Low Latin. 14 Gr., 1 R. Total 15.

6 <sup>3</sup>/<sub>4</sub>f. Professor FORD. — Portuguese. Language and literature. Old Portuguese lyric verse: *Gil Vicente*; *Sa de Miranda*; *Camões*.  
5 Gr. Total 5.

#### *Course of Special Study*

†20. Professor SHELDON. — Investigation of Special Subjects in Romance Philology. 2 Gr. Total 2.

#### Celtic

*Primarily for Graduates:—*

1 <sup>1</sup>/<sub>2</sub>f. Professor F. N. ROBINSON. — Old Irish. General Introduction to Celtic Philology. 6 Gr. Total 6.

2 <sup>3</sup>/<sub>4</sub>f. Professor F. N. ROBINSON. — Middle Irish. Windisch's *Irische Texte*. Lectures on the history of Irish Literature. 5 Gr. Total 5.

#### *Course of Special Study*

20. Professor F. N. ROBINSON. — Investigation of Special Subjects in Celtic Philology. 3 Gr. Total 3.

#### *The Celtic Conference*

Fortnightly conferences were held in Celtic subjects for reading and for the presentation of the results of investigation. In 1911-12 the meetings were chiefly devoted to the study of Ossianic texts in Irish and Scottish Gaelic.

#### Slavic Languages

*For Undergraduates and Graduates:—*

1a. Asst. Professor WIENER. — Russian. 1 Ju. Total 1.

1b. Professor WIENER. — Literature of the Nineteenth Century. Pushkin; Gogol; Turgenev; Tolstoy. Composition. 1 Se., 1 Ju. Total 2.

4 <sup>1</sup>/<sub>2</sub>f. Asst. Professor WIENER. — Introduction to the History of Russian Literature. 4 Se., 5 Ju., 2 So., 2 Fr. Total 18.

5 <sup>3</sup>/<sub>4</sub>f. Asst. Professor WIENER. — Tolstoy and his time. 27 Se., 27 Ju., 10 So., 6 Fr., 1 uC. Total 71.

#### Comparative Literature

*Primarily for Undergraduates:—*

1. Professor WENDELL, assisted by Dr. LEACH and Mr. SCHENCK. — European Literature. General Survey.

27 Se., 37 Ju., 40 So., 19 Fr., 2 Sp., 2 uC. Total 127.

*For Undergraduates and Graduates :—*

- 6a <sup>1</sup>/<sub>hf</sub>. Professor SCHOFIELD, assisted by Dr. WEBSTER. — The Literary History of England and its Relations to that of the Continent from the Beginning to Chaucer. 5 Gr., 27 Se., 22 Ju., 11 So., 10 Fr., 3 Sp. Total 78.
- 6b <sup>1</sup>/<sub>hf</sub>. Professor SCHOFIELD, assisted by Dr. WEBSTER. — The Literary History of England and its Relations to that of the Continent from Chaucer to Elizabeth. 5 Gr., 26 Se., 27 Ju., 23 So., 16 Fr., 2 Sp., 2 uC. Total 111.
7. Asst. Professor POTTER. — Tendencies of European Literature in the Renaissance. 2 Gr., 2 Se., 3 Ju., 1 So. Total 8.
- 30 <sup>1</sup>/<sub>hf</sub>. Asst. Professor WRIGHT. — The Literary Relations of France and England in the Sixteenth and Seventeenth Centuries. 3 Gr., 16 Se., 12 Ju., 3 So., 2 Fr. Total 36.
9. Asst. Professor BABBITT. — Rousseau and his Influence. 3 Gr., 1 Se., 2 Ju., 1 Fr. Total 7.
- 12 <sup>1</sup>/<sub>hf</sub>. Professor BLISS PERRY and Mr. SAVAGE. — Types of Fiction in the Eighteenth and Nineteenth Centuries. 16 Gr., 48 Se., 61 Ju., 25 So., 6 Fr., 2 Sp., 3 uC., 1 Ext. Total 162.
- 8 <sup>1</sup>/<sub>hf</sub>. Professor FRANKKE. — Goethe's Faust; with a study of kindred dramas in European Literature. 3 Gr., 6 Se., 6 Ju., 8 So., 3 Fr., 1 uC. Total 27.
- 13 <sup>1</sup>/<sub>hf</sub>. Professor SCHOFIELD. — Danish and Norwegian Dramatists. Holberg, Oehlenschläger, Björnson and Ibsen, and their relations to European literature. 4 Gr., 1 So. Total 5.

*Primarily for Graduates :—*

- †14. Professor SHELDON. — Mediaeval Literature in the vulgar tongues, with especial reference to the Influence of France and Provence. 2 Gr. Total 2.
- 15 <sup>1</sup>/<sub>hf</sub>. Asst. Professor POTTER. — Epic Poetry. General characteristics. The heroic ballad, the national epic, the literary epic. Types of the popular epic. 1 Gr. Total 1.
- 17 <sup>1</sup>/<sub>hf</sub>. Professor FORD. — The History of the Novel and the Tale in Italy and Spain from the Beginning of the Mediaeval Period to the Eighteenth Century. 5 Gr., 1 Se., 1 So. Total 7.
- 18 <sup>1</sup>/<sub>hf</sub>. Professor NEILSON. — Studies in the Nature and History of Allegory. Lectures and theses. 14 Gr., 3 Ju. Total 17.
- 25 <sup>1</sup>/<sub>hf</sub>. Professor KITTEREDGE. — The English and Scottish Popular Ballads. 15 Gr. Total 15.
- 27 <sup>1</sup>/<sub>hf</sub>. Professor SCHOFIELD. — English Literature of the Fourteenth and Fifteenth Centuries and its relations to Continental Literature. 4 Gr. Total 4.
- †28 <sup>1</sup>/<sub>hf</sub>. Asst. Professor W. G. HOWARD. — German Literature in the Sixteenth Century and its relation to English Literature. Brant, Hutten, Luther, Hans Sachs, Fischart. Popular literature in prose and verse. The drama. 7 Gr., 1 Se., 1 R. Total 9.
- 35 <sup>1</sup>/<sub>hf</sub>. Dr. WEBSTER. — Life in the Middle Ages, as illustrated by Contemporary Literature. 1 Gr., 1 Se., 1 So. Total 3.

*Courses of Special Study*

- 20c. Professor WEIR SMYTH. — The Relations of Greek Literature to European Literature in other Tongues. 1 Gr. Total 1.
- 20h. Professor FORD. — The Relations of Spanish Literature to European Literature in other Tongues. 2 Gr. Total 2.
- 20j. Professor WALZ. — The Relations of Middle High German Literature to European Literature in other Tongues. 2 Gr. Total 2.
- 20k. Professor WIENER. — The Relations of Slavic Literatures to European Literature in other Tongues. 1 Ju. Total 1.

**The Fine Arts***Primarily for Undergraduates:—*

1. Asst. Professor POPE and Mr. MOWER, assisted by Mr. R. E. JONES. — Principles of Drawing and Painting, with elementary practice. 2 G.S., 2 Se., 5 Ju., 5 So., 19 Fr., 3 uC. Total 36.

*For Undergraduates and Graduates:—*

- 2a. Asst. Professor POPE and Mr. MOWER. — Freehand Drawing (formerly Architecture 3a). 3 G.S., 3 Se., 8 Ju., 12 So., 3 Fr., 1 uC. Total 30.
- 2b. Mr. MOWER. — Freehand Drawing (advanced course). 2 G.S., 9 Se., 2 Ju., 4 So. Total 17.
3. Asst. Professor CHASE, assisted by Mr. FROST. — History of Ancient Art. Architecture, Sculpture, and Painting in Egypt, Assyria, and Greece, with some account of the lesser arts. 1 Gr., 1 G.S., 7 Se., 10 Ju., 17 So., 9 Fr. Total 45.
- 4a. Mr. FITZPATRICK, assisted by Mr. BORDEN. — The Fine Arts of the Middle Ages and the Renaissance. 11 Se., 18 Ju., 7 So., 3 Fr. Total 39.
- 4b <sup>1</sup>/<sub>2</sub>f. Mr. FITZPATRICK. — History of Mediaeval Sculpture. 2 Se., 1 Ju., 1 So. Total 4.
- 4c <sup>1</sup>/<sub>2</sub>f. Asst. Professor POPE. — Painting of Venice and of Related Schools in the Sixteenth and Seventeenth Centuries. 8 Se., 3 Ju., 2 Fr. Total 13.
- 5 <sup>1</sup>/<sub>2</sub>f. Mr. W. C. LANE. — The History of the Printed Book. 1 G.B., 1 Ju. Total 2.
- 8a <sup>1</sup>/<sub>2</sub>f. (formerly Architecture 7a). Asst. Professor POPE and Mr. E. O. PARKER. — The Theory of Pure Design. 1 G.S., 2 Ju., 1 Fr., 1 uC. Total 5.
- 8b <sup>1</sup>/<sub>2</sub>f. (formerly Architecture 7b). Dr. ROSS and Mr. E. O. PARKER. — On Drawing and Painting: Theory and Practice. 1 G.S., 2 Se., 3 Ju., 2 So., 1 Fr., 1 uC. Total 10.
9. Dr. POST. — The Art and Culture of Italy in the Middle Ages and the Renaissance. 10 Se., 17 Ju., 7 So., 2 Fr., 1 uC. Total 37.

*Primarily for Graduates:—**Courses of Special Study*

- 20b<sup>2</sup>hf. Mr. E. W. FORBES.—Florentine Painting in the Fifteenth Century.  
1 G.B., 1 Se., 3 Ju. Total 5.
- 20c<sup>2</sup>hf. (formerly Architecture 20b). Dr. ROSS.—Advanced Practice in Drawing and Painting.  
2 Se., 2 Ju., 1 Fr. Total 5.
- 20f. Dr. POST.—History of Italian Art. 1 Fr. Total 1.
- 20g. Asst. Professor POPE.—History of Modern Painting. 1 Fr. Total 1.

**Architecture***For Undergraduates and Graduates:—*

- 1a. Professor H. L. WARREN and Mr. FROST.—Technical and Historical Development of the Ancient Styles, with especial reference to Classic Architecture. 1 G.S., 3 Se., 4 Ju., 9 So., 1 Fr., 2 uC. Total 20.
- 1c. Professor H. L. WARREN and Mr. FROST.—Technical and Historical Development of Renaissance and Modern Architecture.  
7 G.S., 8 Se., 8 Ju., 1 Sp. Total 24.
- 2a. Mr. FROST.—Elementary Architectural Drawing. Elements of Architectural Form. The Orders. 2 Se., 8 Ju., 1 So., 1 uC. Total 12.
- 2b<sup>2</sup>hf. Mr. E. T. PUTNAM.—Stereotomy, Shades and Shadows, and Perspective.  
1 G.S., 4 Se., 7 Ju., 5 So., 1 uC. Total 18.
- 3b. Mr. H. B. WARREN and Mr. MURPHY.—Freehand Drawing. Drawing from the Life. 8 G.S., 6 Se., 3 Ju., 1 So. Total 18.

*Primarily for Graduates:—*

- 3c. Mr. H. B. WARREN and Mr. MURPHY.—Freehand Drawing. Architectural Subjects and from the Life. 3 G.S., 1 Sp. Total 4.
- 3d. Mr. H. B. WARREN and Mr. MURPHY.—Freehand Drawing. Architectural Subjects and from the Life. 2 G.S. Total 2.
- 4a. Mr. E. T. PUTNAM, with lectures by Professor H. L. WARREN, and occasional criticism by Asst. Professor HUMPHREYS.—Elementary Architectural Design. 2 G.S., 1 Ju. Total 3.
- 4b. Asst. Professor HUMPHREYS, with occasional criticism by Professor DUQUESNE.—Architectural Design (second course).  
9 G.S., 2 Se. Total 11.
- 4c. Professor DUQUESNE, assisted by Professor HUMPHREYS.—Architectural Design (advanced course). 6 G.S. Total 6.
- 5a. Asst. Professor KILLAM.—Materials and Methods of Building Construction. 1 G.S., 1 Se., 1 Ju. Total 3.
- 5b. Asst. Professor KILLAM.—Theory of Building Construction; Statics; Resistance of Materials and Elementary Structural Design. 6 G.S., 1 Se. Total 7.
- 6 hf. Mr. LAWRIE.—Modelling. Practice in modelling architectural ornament in clay. 10 G.S. Total 10.

- 7<sup>1</sup>. Professor SABINE. — Architectural Acoustics. 1 Gr., 10 G.S. Total 11.
- 9<sup>2</sup>. Messrs. R. S. PEABODY, F. M. DAY, and GILBERT. — Professional Practice. Requirements of Special Classes of Buildings. Nine lectures.  
19 G.S., 2 Se., 3 Ju., 1 Sp. Total 25.

*Courses of Special Study*

- 20a. Professor H. L. WARREN. — Study of Special Periods in the History of Architecture. 1 Gr., 2 G.S. Total 3.
- 20d. Professor DUQUESNE. — Advanced Practice in Architectural Design. 6 G.S. Total 6.

**Landscape Architecture**

*Primarily for Graduates : —*

2. Asst. Professor H. V. HUBBARD. — Practice in Design (first course). Private estates and related problems. Study of local examples, with measured drawings, sketch plans, and reports; solution of original problems based on topographical surveys. 5 G.S. Total 5.
3. Asst. Professor H. V. HUBBARD, with occasional instruction by Professor OLMSTED. — Practice in Design (second course). Park and city planning. 4 G.S. Total 4.
4. Asst. Professor H. V. HUBBARD. — Principles of Construction (first course). 5 G.S. Total 5.
5. Asst. Professor H. V. HUBBARD, with occasional instruction by Professor OLMSTED. — Principles of Construction (second course). 2 G.S. Total 2.
6. Mr. WATSON. — Elements of Horticulture. 3 G.S. Total 3.
7. Mr. WATSON. — Plants in Relation to Planting Design. 4 G.S. Total 4.
8. Mr. WATSON. — Planting Design (first course). 3 G.S., 1 Se. Total 4.
9. Mr. WATSON. — Planting Design (second course). Advanced work following the methods of Course 8. 3 G.S., 1 Se. Total 4.
11. Asst. Professor H. V. HUBBARD. — Elementary Drafting, with special reference to forms used in Landscape Design. 2 G.S., 2 Ju. Total 4.

**Music**

*For Undergraduates and Graduates : —*

1. Asst. Professor HEILMAN, assisted by Dr. CLAPP. — Harmony, the Grammar of Music. 2 Ju., 8 So., 22 Fr., 1 Sp., 2 uC., 1 And., 1 Ext. Total 37.
- 1a hf. Asst. Professor SPALDING. — Advanced Harmony and Harmonic Analysis. 3 Gr., 3 Ju., 4 So., 1 Fr. Total 11.
2. Asst. Professor SPALDING, assisted by Dr. DAVISON. — Counterpoint. 1 Gr., 1 Ju., 7 So., 3 Fr. Total 12.
3. Asst. Professor SPALDING. — History of Music from the time of Palestrina to the present day. 2 Gr., 11 Se., 7 Ju., 8 So., 8 Fr. Total 36.

4. Asst. Professors SPALDING and HEILMAN. — The Appreciation of Music; analytical study of masterpieces from the point of view of the listener.

1 Gr., 4 Se., 26 Ju., 20 So., 4 Fr., 1 Sp. Total 56.

- 4b hf. Mr. HILL. — D'Indy, Fauré, Debussy: a critical study of their respective contributions to modern music.

3 Gr., 2 Ju., 2 So. Total 7.

- 5 hf. Asst. Professor HEILMAN. — Canon and Fugue.

2 Gr., 4 Se., 1 Sp. Total 7.

*Primarily for Graduates: —*

- †6. Mr. HILL. — Instrumentation. 4 Gr., 1 Se., 5 Ju., 2 So., 1 Fr. Total 18.

- 7 hf. Mr. HILL. — A Preliminary Course in Composition, devoted chiefly to the smaller forms.

2 Gr., 4 Se., 3 Ju. Total 9.

## GROUP II

### History of Science

- 1 hf. Asst. Professor HENDERSON. — History of the Physical and Biological Sciences (introductory course).

2 Gr., 11 Se., 19 Ju., 6 So., 4 Fr., 2 uC. Total 44.

### Astronomy

*Primarily for Undergraduates: —*

1. Professor WILLSON and Dr. DUNCAN. — Descriptive Astronomy.

6 Se., 19 Ju., 35 So., 13 Fr., 4 uC. Total 77.

- E hf. Dr. DUNCAN. — Astronomy for Engineers. A modification of the first half-year of Astronomy 1, in which special attention was given to the methods of determining the meridian, finding the variation of the compass, time and latitude by theodolite, etc.

7 Se., 9 Ju., 4 So., 1 Fr., 1 Sp., 1 uC. Total 23.

- 2 hf. Professor WILLSON. — Practical Astronomy. Application of Astronomy to Navigation and Exploration.

4 Se., 3 Ju. Total 7.

*For Undergraduates and Graduates: —*

3. Professor WILLSON. — Practical Astronomy. Portable and fixed instruments. Time and longitude by transit; latitude by zenith telescope; meridian circle.

1 uC. Total 1.

- 4a hf. Dr. DUNCAN. — The Determination of Orbits. Olbers' method for the parabolic orbits; Gauss' method for elliptic orbits.

2 Ju., 1 Sp. Total 3.

- 4b hf. Dr. DUNCAN. — The Determination of Orbits. Leuschner's method for orbits of any eccentricity; orbits of visual and spectroscopic binary stars.

2 Ju. Total 2.

*Primarily for Graduates: —*

5. Professor WILLSON. — Practical Astronomy. Instruments of the fixed observatory. Meridian circle; almucantar; equatorial instrument; absolute determinations.

2 Se., 1 Ju. Total 3.

## Physics

*Primarily for Undergraduates :—*

**B. Professor HALL, Asst. Professor G. W. PIERCE, and Mr. EVANS.**—Elementary Physics. 1 Ju., 9 So., 88 Fr., 2 Sp. Total 50.

**C. Professor SABINE, Asst. Professors H. W. MORSE and H. N. DAVIS, Dr. BRIDGMAN, and Messrs. HARRY CLARK, and D. L. WEBSTER.**—Experimental Physics. Mechanics, Sound, Light, Magnetism, and Electricity. 5 Se., 15 Ju., 86 So., 70 Fr., 8 Sp., 4 uC. Total 188.

1. Professor HALL and Mr. EVANS.—General Descriptive Physics. 1 Gr., 5 Se., 7 Ju., 7 So., 15 Fr., 2 uC. Total 37.

11 <sup>1</sup>/<sub>hf</sub>. Asst. Professor H. W. MORSE.—The Theory of Primary and Secondary Batteries. 2 Se., 4 Ju., 1 Fr., 1 Sp. Total 8.

14 <sup>1</sup>/<sub>hf</sub>. Asst. Professor H. W. MORSE.—The Theory of Photography. 3 Se., 3 Ju., 1 Fr., 2 Sp. Total 9.

*For Undergraduates and Graduates :—*

2 <sup>1</sup>/<sub>hf</sub>. Professor SABINE and Asst. Professor LYMAN.—Light. 3 Gr., 1 Sp. Total 4.

3. Professor B. O. PEIRCE, assisted by Mr. KENT.—Electrostatics, Electromagnetism, and parts of Electromagnetism. 2 Gr., 4 G.S., 2 Se., 12 Ju., 2 So. Total 22.

12 <sup>1</sup>/<sub>hf</sub>. Asst. Professor LYMAN.—Electric Conduction in Gases and Radioactivity, with special reference to Modern Theories of the Constitution of Matter. 2 Gr., 8 Ju., 1 So. Total 11.

17 <sup>2</sup>/<sub>hf</sub>. Asst. Professor G. W. PIERCE.—Electric Waves and their Application to Wireless Telegraphy. 1 Gr., 2 Se., 5 Ju., 1 Fr. Total 9.

4a <sup>1</sup>/<sub>hf</sub>. Asst. Professor LYMAN and Dr. HAYES.—Magnetic Measurements and the Elementary Theory of Alternating Currents. 5 Gr., 4 G.S., 3 Se., 2 Ju. Total 14.

4b <sup>2</sup>/<sub>hf</sub>. Asst. Professor G. W. PIERCE.—Maxwell's Electromagnetic Theory. Electric Oscillations and Electric Waves. 3 Gr., 3 G.S. Total 6.

5. Professor SABINE.—Light. 4 Gr., 1 Sp. Total 5.

6a <sup>1</sup>/<sub>hf</sub>. Professor HALL.—Elements of Thermodynamics. 4 Gr., 3 Ju., 1 So. Total 8.

6b <sup>2</sup>/<sub>hf</sub>. Professor HALL.—Modern Developments and Applications of Thermodynamics. 3 Gr., 1 G.S., 1 Se., 2 Ju. Total 7.

*Primarily for Graduates :—*

8 <sup>2</sup>/<sub>hf</sub>. Asst. Professor H. N. DAVIS.—Thermal Properties of Matter. 7 Gr. Total 7.

†10. Professor B. O. PEIRCE.—The Mathematical Theory of Electricity and Magnetism (second course). 5 Gr. Total 5.

*Courses of Research*

- 20d. Professor SABINE. — Light and Heat. 2 Gr. Total 2.  
 20e. Asst. Professor G. W. PIERCE. — Radiation and Electromagnetic Waves. 2 Gr. Total 2.  
 20g. Asst. Professor LYMAN. — Light of Short Wave-Lengths. 1 Gr. Total 1.  
 20h. Asst. Professor H. N. DAVIS. — Heat. 2 Gr. Total 2.

**Chemistry***Primarily for Undergraduates:—*

1. Professor C. L. JACKSON and Mr. FISKE, assisted by Messrs. BARTLETT, DANIELS, JONES, and MELDRUM. — Descriptive Inorganic Chemistry.  
2 Gr., 7 Se., 20 Ju., 57 So., 238 Fr., 3 Sp., 6 uC. Total 338.
- 2 <sup>1</sup>/<sub>2</sub>f. Dr. KELLEY, assisted by Mr. EARLE. — Organic Chemistry (elementary course).  
2 Gr., 1 G.S., 17 Se., 30 Ju., 86 So., 8 Fr., 2 Sp., 4 uC., 1 Ext. Total 101.
3. Professor SANGER and Dr. G. S. FORBES, assisted by Messrs. HUBBARD, WHITMORE, BRYAN, DAHL, and McLAUGHLIN. — Qualitative Analysis.  
9 Se., 31 Ju., 28 So., 8 Fr., 4 uC. Total 80.
- 8 <sup>3</sup>/<sub>4</sub>f. Professor RICHARDS and Dr. G. S. FORBES, assisted by Mr. BARRY. — Elementary Theoretical and Physical Chemistry, including the Historical Development of Chemical Theory.  
6 Gr., 9 Se., 27 Ju., 25 So., 2 Fr., 3 Sp., 3 uC. Total 75.

*For Undergraduates and Graduates:—*

4. Asst. Professor BAXTER, assisted by Mr. VOTER. — Quantitative Analysis, gravimetric and volumetric.  
5 Gr., 7 Se., 14 Ju., 7 So., 1 Fr., 1 Sp., 3 uC. Total 38.
- 9 <sup>1</sup>/<sub>2</sub>f. Asst. Professor BAXTER, assisted by Dr. C. J. MOORE. — Advanced Quantitative Analysis.  
7 Gr., 3 Se., 8 Ju. Total 18.
- 10 <sup>3</sup>/<sub>4</sub>f. Asst. Professor BAXTER, assisted by Dr. C. J. MOORE. — Gas Analysis.  
5 Gr., 3 Se., 7 Ju., 1 So. Total 16.
5. Dr. KELLEY, assisted by Mr. PATCH. — The Carbon Compounds.  
9 Gr., 4 Se., 20 Ju., 3 So. Total 36.
- 15 <sup>3</sup>/<sub>4</sub>f. Asst. Professor HENDERSON. — General Biological Chemistry.  
3 Gr., 11 Se., 8 Ju., 1 So., 1 Sp., 1 uC., 1 Me. Total 26.
11. Dr. LATHAM CLARKE. — Industrial Chemistry.  
7 Gr., 1 G.S., 7 Se., 18 Ju., 1 So. Total 34.
- 18 <sup>1</sup>/<sub>2</sub>f. Dr. LATHAM CLARKE. — Inorganic Preparations. Chiefly laboratory work.  
2 Gr., 4 Se. Total 6.
- 19 <sup>3</sup>/<sub>4</sub>f. Dr. LATHAM CLARKE. — Technical Analysis. Chiefly laboratory work.  
3 Gr., 4 Se., 2 Ju. Total 9.

*Primarily for Graduates:—*

6. Professor RICHARDS and Dr. G. S. FORBES, assisted by Mr. SHIPLEY. — Physical Chemistry.  
12 Gr., 10 Se., 3 Ju. Total 25.



- 4f<sup>2</sup>. Asst. Professor HUGHES and Mr. PAIGE. — Railroad Engineering (second course). Problems in railroad construction and economics.  
4 G.S., 1 G.B., 1 Se. Total 6.
- 4k. Asst. Professor HUGHES and assistants. — Surveying: Use of Instruments; Plane and topographical surveying; levelling; map drawing and field practice.  
1 G.S., 1 uC., 1 S.S. Total 3.
- 5f. Professor L. J. JOHNSON and Mr. NICHOLS. — Mechanics of Structures.  
9 G.S., 2 Se. Total 11.
- 5g<sup>1</sup>. Professor HOLLIS. — Mechanics of Machinery and Boilers.  
2 G.S. Total 2.
- 6d<sup>1</sup>. Asst. Professor HUGHES, and Messrs. SAFFORD and PAIGE. — Hydraulics (second course). Water measurements; water power; and miscellaneous problems in hydraulic engineering.  
8 G.S., 2 Se. Total 10.
- 7b. Professor SWAIN and Mr. NICHOLS. — Theory and Design of Structures of Wood, Stone, and Metal.  
11 G.S. Total 11.
- 8a<sup>1</sup>. Asst. Professor KILLAM. — Foundations, Masonry, and Fireproofing.  
9 G.S., 4 Se. Total 13.
- 9a<sup>2</sup>. Professor G. C. WHIPPLE, Messrs. J. W. M. BUNKER and M. C. WHIPPLE. — Sanitary Engineering (introductory course).  
1 Gr., 11 G.S., 3 Se., 2 Me. Total 17.
- 12a<sup>2</sup>. Professor MARKS. — Efficiency and Economics of Heat Engines.  
1 G.S., 1 Se. Total 2.
- 13b<sup>3</sup>. Professor MARKS, assisted by Messrs. DODDS and MAKAREVICH. — Mechanical Engineering Laboratory.  
1 G.S. Total 1.
- 14b<sup>1</sup>. Professor HOLLIS, assisted by Mr. MERRIAM. — Machine Design.  
2 G.S. Total 2.
- 16b. Professor CLIFFORD and Mr. DOGGETT. — Generation, Transmission, and Distribution of Electrical Energy (second course).  
6 Gr. Total 6.
- 16j<sup>1</sup>. Professor ADAMS and Messrs. CRANE and DOGGETT. — Direct Currents and Direct-Current Machinery.  
2 G.S., 2 Se. Total 4.
- 16l<sup>2</sup>. Professor CLIFFORD, Messrs. CRANE and LIEBERKNECHT. — Alternating Currents.  
3 G.S., 1 Se. Total 4.
- 16n<sup>1</sup>. Professor CLIFFORD, Messrs. CRANE and LIEBERKNECHT. — Alternating-Current Machinery.  
6 G.S., 1 Sp. Total 7.
- 16p<sup>2</sup>. Professor KENNELLY and Mr. LIEBERKNECHT. — Electric Transmission and Distribution of Power.  
4 G.S., 1 Sp. Total 5.
- 17b<sup>1</sup>. Professor KENNELLY and Mr. LIEBERKNECHT. — Telegraphy and Telephony.  
3 G.S. Total 3.
- 17c<sup>2</sup>. Professor KENNELLY and Mr. LIEBERKNECHT. — Illumination and Photometry.  
3 G.S., 1 Se., 1 Sp. Total 5.
- 17d. Professor ADAMS and Mr. DOGGETT. — Dynamo Design. 3 G.S. Total 3.
- 17e<sup>1</sup>. Asst. Professor G. W. PIERCE and Dr. E. L. CHAFFEE. — Radiotelegraphic Engineering.  
2 Gr., 5 G.S., 1 Se. Total 8.

- 17f. Asst. Professor H. W. MORSE. — Storage Batteries and their Application in Electrical Engineering. 8 G.S. Total 8.
- 18a<sup>1</sup>. Professor HOLLIS, assisted by Mr. MERRIAM. — Power Station Design. 8 G.S. Total 8.
- 21<sup>2</sup>. Professors SWAIN, HOLLIS, KENNELLY, and CLIFFORD. — Conference on Engineering Subjects. 1 Gr., 10 G.S. Total 11.
- 22<sup>2</sup>. Professor WYMAN. — Contracts and Specifications. General Principles of Common Law governing Construction Contracts. 12 G.S., 7 Se., 1 Ju. Total 20.

*Courses in Special Fields*

- 20a. Professor ADAMS. — Electrical Engineering Research. 2 G.S. Total 2.
- 20b. Professor CLIFFORD. — Electrical Engineering Research. 5 G.S. Total 5.
- 20c. Professor KENNELLY. — Electrical Engineering Research. 2 G.S. Total 2.
- 20d. Professor L. J. JOHNSON and Mr. NICHOLS. — Reinforced Concrete. 1 G.S. Total 1.
- 20e. Professor SWAIN. — Structures of Wood, Masonry, and Metal. 5 G.S. Total 5.
- 20h. Professor MARKS. — Internal Combustion Motors. 2 G.S. Total 2.
- 20q. Professor WHIPPLE. — Sanitary Engineering. 1 G.S., 1 Me. Total 2.
- 20r. Professor HOLLIS. — Steam Turbine. 2 G.S. Total 2.
- 20s. Asst. Professor G. W. PIERCE. — Wireless Telegraphy. 8 G.S. Total 3.

**Botany**

*Primarily for Undergraduates:—*

- 1<sup>2</sup>hf. Asst. Professor OSTERHOUT, assisted by Messrs. BROOKS, HOAR, REED, and WHITE. — Botany (introductory course). 1 Gr., 9 Se., 13 Ju., 36 So., 65 Fr., 2 Sp., 7 uC. Total 133.
- 2<sup>1</sup>hf. Professor THAXTER, assisted by Messrs. COLLEY and HOAR. — Morphology of Plants. 1 Gr., 4 Se., 3 Ju., 9 So., 2 Fr., 1 Sp. Total 20.

*For Undergraduates and Graduates:—*

- 3<sup>1</sup>hf. Professor JEFFREY, assisted by Mr. EAMES. — General Morphology, Histology, and Cytology of Vascular Plants. 3 Gr., 1 G.S., 2 Ju., 1 So. Total 7.
- 4<sup>1</sup>hf. Professor THAXTER, assisted by Mr. COLLEY. — The Algae, Liverworts, and Mosses. 6 Gr., 2 Se., 2 Ju., 2 So., 1 Fr. Total 13.
7. Asst. Professor FERNALD, assisted by Messrs. BLAKE and HILL. — Classification and Distribution of Flowering Plants, with special reference to the Flora of New England and the Maritime Provinces. 2 Gr., 2 G.S., 1 Se., 1 Ju., 2 So. Total 8.
- 8<sup>1</sup>hf. Professor JEFFREY and Mr. BAILEY, assisted by Mr. SINNOTT. — Structure of Woods: microscopic features. 2 Gr., 12 G.S. Total 14.

- 12 <sup>1</sup>/<sub>2</sub>f. Asst. Professor BAXTER, assisted by Mr. SHIPLEY.—Photochemistry, including the use of Optical Instruments in Chemistry. 7 Gr., 1 Se. Total 8.
- 7 <sup>1</sup>/<sub>2</sub>f. Dr. G. S. FORBES.—Electrochemistry. 6 Gr., 2 Se. Total 8.
- 13 <sup>1</sup>/<sub>2</sub>f. Dr. G. S. FORBES, assisted by Mr. SHIPLEY.—Experimental Electrochemistry. 4 Gr., 1 Se. Total 5.
- 16 <sup>1</sup>/<sub>2</sub>f. Dr. KELLEY.—The General Reactions of Organic Chemistry. 3 Gr., 6 Se., 2 Ju. Total 11.
- 17 <sup>1</sup>/<sub>2</sub>f. Dr. KELLEY.—Special Topics in Advanced Organic Chemistry. 4 Gr., 6 Se., 3 Ju., 1 So., 1 Sp. Total 15.

#### *Courses of Research*

- 20a. Professor RICHARDS.—Inorganic Chemistry, including Determination of Atomic Weights. 3 Gr., 1 G.S. Total 4.
- 20b. Professor C. L. JACKSON.—Organic Chemistry. 4 Gr. Total 4.
- 20c. Dr. LATHAM CLARKE.—Organic Chemistry. 2 Gr. Total 2.
- 20d. Professor RICHARDS.—Physical Chemistry, including Electrochemistry. 2 Gr. Total 2.
- 20f. Asst. Professor BAXTER.—Inorganic Chemistry, including Determination of Atomic Weights. 5 Gr., 1 Sp. Total 6.
- 20g. Asst. Professor BAXTER.—Physical Chemistry. Stoichiometry (determination of physicochemical constants). 1 Gr. Total 1.
- 20h. Dr. G. S. FORBES.—Physical Chemistry, including Electrochemistry. 1 Gr. Total 1.
- 20i. Dr. LATHAM CLARKE.—Industrial Chemistry. 1 Se. Total 1.
- 20k. Asst. Professor HENDERSON.—Biological Chemistry. 1 Gr. Total 1.

#### **Engineering**

##### *Primarily for Undergraduates:—*

- 3k. Asst. Professors KENNEDY and A. E. NORTON, and Messrs. NINDE and THOROGOOD.—Mechanical Drawing. Use of instruments. Projections and descriptive geometry. 1 Gr., 5 G.S., 7 Se., 17 Ju., 44 So., 19 Fr., 5 uC. Total 98.
- 3l. Asst. Professor A. E. NORTON, and Messrs. NINDE and THOROGOOD.—Elements of Engineering Design. Mechanism (gearing, linkages, etc.), machine drawing, and elementary design. 1 G.S., 5 Se., 13 Ju., 6 So., 1 uC. Total 26.
- 10a. Mr. MARKHAM.—Chipping, Filing, and Fitting. Use of hand tools. Fitting by hand. Study of the metals in practical working. 1 Se., 5 Ju., 6 So., 9 Fr., 1 Sp., 4 S.S. Total 26.
- 10b. Mr. MARKHAM.—Blacksmithing. Use of tools. Forging, welding, tool-dressing and tempering. 1 Se., 5 Ju., 6 So., 9 Fr., 1 Sp., 7 S.S. Total 29.

10c. Mr. MARKHAM. — Pattern Making and Foundry Practice. Use of wood-working tools. Casting in iron and alloys.

6 Ju., 6 So., 9 Fr., 1 Sp., 4 S.S. Total 26.

10c. Mr. MARKHAM. — Machine Shop Practice.

1 Se., 6 Ju., 7 So., 6 Fr., 1 Sp., 7 S.S. Total 28.

~~Engineering~~ Engineering 10a, 10b, 10c, 10e count together as  $1\frac{1}{2}$  courses for the degree of S.B.

*For Undergraduates and Graduates : —*

3m. Asst. Professor KENNEDY and Mr. NINDE. — Engineering Design. Design of parts of machinery and other engineering structures. Proportioning the parts for strength and effect. 2 G.S., 8 Se., 6 Ju. Total 16.

4a<sup>h</sup>f. Asst. Professor HUGHES and assistants. — Surveying. Use of instruments; plane and topographical surveying; levelling; map drawing and field-practice.

3 Se., 15 Ju., 12 So., 20 Fr., 1 uC., 8 S.S., 3 from Associate Institutions. Total 62.

4d. Asst. Professor HUGHES and assistants. — Railroad Engineering (first course). Railroad curves and location; field and office practice.

2 Se., 12 Ju., 11 So., 13 Fr., 1 uC., 4 S.S., 1 from an Associate Institution. Total 44.

5a<sup>1</sup>h<sup>f</sup>. Professor L. J. JOHNSON, Asst. Professor H. N. DAVIS, and Mr. NICHOLS. — Kinetics (second course). 1 Gr., 2 G.S., 7 Se., 13 Ju. Total 23.

5b<sup>h</sup>f. Asst. Professor A. E. NORTON. — Elementary Statics. Graphic and Algebraic Methods. 1 Se., 3 Ju., 2 So. Total 6.

5c<sup>2</sup>h<sup>f</sup>. Professor L. J. JOHNSON, Asst. Professor H. N. DAVIS, and Mr. NICHOLS. — Elementary Resistance of Materials.

3 G.S., 10 Se., 14 Ju., 1 So., 1 Fr., 1 Sp. Total 30.

5e<sup>h</sup>f. Asst. Professor A. E. NORTON. — Elementary Kinematics and Kinetics.

1 Se., 1 Ju., 1 So. Total 3.

6a<sup>2</sup>h<sup>f</sup>. Asst. Professor HUGHES and Mr. PAIGE. — Elementary Hydraulics.

6 G.S., 1 G.B., 15 Se., 9 Ju., 1 So., 1 Sp. Total 33.

11a<sup>2</sup>h<sup>f</sup>. Professor HOLLIS, and Messrs. MARKHAM, MERRIAM and SPOFFORD. — Steam Machinery (introductory course).

5 G.S., 19 Se., 18 Ju., 23 So., 8 Fr., 1 uC. Total 74.

12b<sup>1</sup>h<sup>f</sup>. Professor MARKS and Mr. LOOMIS. — Elements of Thermodynamics. Theory of heat engines. 4 G.S., 13 Se., 23 Ju., 1 Sp. Total 41.

13a. Professor MARKS and Messrs. DODDS and MAKAREVICH. — Engineering Laboratory. A course in experimental methods.

7 G.S., 18 Se., 3 Ju., 1 So. Total 29.

16a. Professor KENNELLY, Messrs. CRANE, DOGGETT, and LIEBERKNECHT. — Generation, Transmission, and Utilization of Electrical Energy (elementary course). 7 G.S., 19 Se., 14 Ju., 2 So., 1 Fr., 1 Sp. Total 44.

*Primarily for Graduates : —*

4e<sup>1</sup>. Asst. Professor HUGHES and Mr. PAIGE. — Road Engineering.

4 G.S., 2 Se. Total 6.

- 4f<sup>2</sup>. Asst. Professor HUGHES and Mr. PAIGE. — Railroad Engineering (second course). Problems in railroad construction and economics.  
4 G.S., 1 G.B., 1 Se. Total 6.
- 4k. Asst. Professor HUGHES and assistants. — Surveying: Use of Instruments; Plane and topographical surveying; levelling; map drawing and field practice.  
1 G.S., 1 uC., 1 S.S. Total 3.
- 5f. Professor L. J. JOHNSON and Mr. NICHOLS. — Mechanics of Structures.  
9 G.S., 2 Se. Total 11.
- 5g<sup>1</sup>. Professor HOLLIS. — Mechanics of Machinery and Boilers.  
2 G.S. Total 2.
- 6d<sup>1</sup>. Asst. Professor HUGHES, and Messrs. SAFFORD and PAIGE. — Hydraulics (second course). Water measurements; water power; and miscellaneous problems in hydraulic engineering.  
8 G.S., 2 Se. Total 10.
- 7b. Professor SWAIN and Mr. NICHOLS. — Theory and Design of Structures of Wood, Stone, and Metal.  
11 G.S. Total 11.
- 8a<sup>1</sup>. Asst. Professor KILLAM. — Foundations, Masonry, and Fireproofing.  
9 G.S., 4 Se. Total 13.
- 9a<sup>2</sup>. Professor G. C. WHIPPLE, Messrs. J. W. M. BUNKER and M. C. WHIPPLE. — Sanitary Engineering (introductory course).  
1 Gr., 11 G.S., 3 Se., 2 Me. Total 17.
- 12a<sup>2</sup>. Professor MARKS. — Efficiency and Economics of Heat Engines.  
1 G.S., 1 Se. Total 2.
- 13b<sup>2</sup>. Professor MARKS, assisted by Messrs. DODDS and MAKAREVICH. — Mechanical Engineering Laboratory.  
1 G.S. Total 1.
- 14b<sup>1</sup>. Professor HOLLIS, assisted by Mr. MERRIAM. — Machine Design.  
2 G.S. Total 2.
- 16b. Professor CLIFFORD and Mr. DOGGETT. — Generation, Transmission, and Distribution of Electrical Energy (second course).  
6 Gr. Total 6.
- 16j<sup>1</sup>. Professor ADAMS and Messrs. CRANE and DOGGETT. — Direct Currents and Direct-Current Machinery.  
2 G.S., 2 Se. Total 4.
- 16l<sup>2</sup>. Professor CLIFFORD, Messrs. CRANE and LIEBERKNECHT. — Alternating Currents.  
8 G.S., 1 Se. Total 4.
- 16n<sup>1</sup>. Professor CLIFFORD, Messrs. CRANE and LIEBERKNECHT. — Alternating-Current Machinery.  
6 G.S., 1 Sp. Total 7.
- 16p<sup>2</sup>. Professor KENNELLY and Mr. LIEBERKNECHT. — Electric Transmission and Distribution of Power.  
4 G.S., 1 Sp. Total 5.
- 17b<sup>1</sup>. Professor KENNELLY and Mr. LIEBERKNECHT. — Telegraphy and Telephony.  
3 G.S. Total 3.
- 17c<sup>2</sup>. Professor KENNELLY and Mr. LIEBERKNECHT. — Illumination and Photometry.  
3 G.S., 1 Se., 1 Sp. Total 5.
- 17d. Professor ADAMS and Mr. DOGGETT. — Dynamo Design. 3 G.S. Total 3.
- 17e<sup>1</sup>. Asst. Professor G. W. PIERCE and Dr. E. L. CHAFFEE. — Radiotelegraphic Engineering.  
2 Gr., 5 G.S., 1 Se. Total 8.

- 17f. Asst. Professor H. W. MORSE. — Storage Batteries and their Application in Electrical Engineering. 8 G.S. Total 8.
- 18a<sup>2</sup>. Professor HOLLIS, assisted by Mr. MERRIAM. — Power Station Design. 8 G.S. Total 8.
- 21<sup>2</sup>. Professors SWAIN, HOLLIS, KENNELLY, and CLIFFORD. — Conference on Engineering Subjects. 1 Gr., 10 G.S. Total 11.
- 22<sup>2</sup>. Professor WYMAN. — Contracts and Specifications. General Principles of Common Law governing Construction Contracts. 12 G.S., 7 Se., 1 Ju. Total 20.

*Courses in Special Fields*

- 20a. Professor ADAMS. — Electrical Engineering Research. 2 G.S. Total 2.
- 20b. Professor CLIFFORD. — Electrical Engineering Research. 5 G.S. Total 5.
- 20c. Professor KENNELLY. — Electrical Engineering Research. 2 G.S. Total 2.
- 20d. Professor L. J. JOHNSON and Mr. NICHOLS. — Reinforced Concrete. 1 G.S. Total 1.
- 20e. Professor SWAIN. — Structures of Wood, Masonry, and Metal. 5 G.S. Total 5.
- 20h. Professor MARKS. — Internal Combustion Motors. 2 G.S. Total 2.
- 20q. Professor WHIPPLE. — Sanitary Engineering. 1 G.S., 1 Me. Total 2.
- 20r. Professor HOLLIS. — Steam Turbine. 2 G.S. Total 2.
- 20s. Asst. Professor G. W. PIERCE. — Wireless Telegraphy. 8 G.S. Total 8.

**Botany**

*Primarily for Undergraduates:—*

- 1<sup>1</sup>/<sub>2</sub>f. Asst. Professor OSTERHOUT, assisted by Messrs. BROOKS, HOAR, REED, and WHITE. — Botany (introductory course). 1 Gr., 9 Se., 18 Ju., 36 So., 65 Fr., 2 Sp., 7 uC. Total 133.
- 2<sup>1</sup>/<sub>2</sub>f. Professor THAXTER, assisted by Messrs. COLLEY and HOAR. — Morphology of Plants. 1 Gr., 4 Se., 3 Ju., 9 So., 2 Fr., 1 Sp. Total 20.

*For Undergraduates and Graduates:—*

- 3<sup>1</sup>/<sub>2</sub>f. Professor JEFFREY, assisted by Mr. EAMES. — General Morphology, Histology, and Cytology of Vascular Plants. 3 Gr., 1 G.S., 2 Ju., 1 So. Total 7.
- 4<sup>2</sup>/<sub>5</sub>f. Professor THAXTER, assisted by Mr. COLLEY. — The Algae, Liverworts, and Mosses. 6 Gr., 2 Se., 2 Ju., 2 So., 1 Fr. Total 13.
7. Asst. Professor FERNALD, assisted by Messrs. BLAKE and HILL. — Classification and Distribution of Flowering Plants, with special reference to the Flora of New England and the Maritime Provinces. 2 Gr., 2 G.S., 1 Se., 1 Ju., 2 So. Total 8.
- 8<sup>1</sup>/<sub>2</sub>f. Professor JEFFREY and Mr. BAILEY, assisted by Mr. SINNOTT. — Structure of Woods: microscopic features. 2 Gr., 12 G.S. Total 14.

## PALAEONTOLOGY

20d<sup>3</sup>. Professor RAYMOND. — Palaeontology. 3 Gr., 1 G.S. Total 4.

## ECONOMIC GEOLOGY

*For Undergraduates and Graduates : —*

18<sup>2</sup>hf. Professor WOLFF and Asst. Professor PALACHE, and an assistant. —  
Economic Geology of the Non-Metalliferous Substances.

1 Se. Total 1.

*Primarily for Graduates : —*

20b. Professor GRATON. — Economic Geology (research course).

1 G.S. Total 1.

## GEOGRAPHY

*Primarily for Undergraduates : —*

A<sup>1</sup>hf. Asst. Professor D. W. JOHNSON and Mr. BROOKS. — Physical Geography  
(introductory course).

4 Se., 5 Ju., 12 So., 27 Fr., 1 Sp., 2 uC. Total 51.

*For Undergraduates and Graduates : —*

10<sup>1</sup>hf. Asst. Professor D. W. JOHNSON. — Geomorphology.

1 Gr., 1 Ju. Total 2.

2<sup>1</sup>hf. Professor WARD. — Geography of South America.

3 Gr., 1 Se., 1 Ju., 1 So. Total 6.

*Primarily for Graduates : —*

†20a. Professor DAVIS and Asst. Professor D. W. JOHNSON. — Physiography  
(research course).

1 Gr. Total 1.

## METEOROLOGY AND CLIMATOLOGY

*Primarily for Undergraduates : —*

B<sup>2</sup>hf. Professor WARD, assisted by Mr. LINSLEY. — Meteorology (introductory  
course).

4 Se., 5 Ju., 12 So., 31 Fr., 1 Sp., 1 uC. Total 54.

*For Undergraduates and Graduates : —*

1<sup>1</sup>hf. Professor WARD. — Climatology of North America.

1 Gr., 1 Se., 1 Ju., 1 So. Total 4.

2<sup>1</sup>hf. Professor WARD. — See Geography, above.

19<sup>1</sup>hf. Professor WARD. — Climatology (general course).

2 Se., 1 Ju., 2 So. Total 5.

*Primarily for Graduates : —*

20e. Professor WARD. — Climatology (research course). 2 Gr. Total 2.

20f. Professors ROTCH and WARD. — Meteorology (research course).

2 Gr. Total 2.

## Mineralogy and Petrography

*Primarily for Undergraduates : —*

2. Asst. Professor PALACHE, assisted by Mr. R. E. SOMERS. — Mineralogy  
(including Crystallography, Physical and Chemical Mineralogy, and  
Descriptive Mineralogy). 1 Gr., 5 Se., 6 Ju., 1 So., 5 Fr. Total 18.

*For Undergraduates and Graduates :—*

10<sup>3</sup>/<sub>4</sub>hf. Asst. Professor PALACHE. — Advanced Mineralogy. Lectures on selected topics. 3 Gr., 2 G.S., 1 Se. Total 6.

12. Professor WOLFF, assisted by Mr. SOMERS. — Petrography. 4 Gr., 2 Se. Total 6.

*Primarily for Graduates :—*

14<sup>1</sup>/<sub>4</sub>hf. Professor WOLFF. — Advanced Petrography. 1 Gr., 7 G.S. Total 8.

**Mining and Metallurgy***Primarily for Undergraduates :—*

B<sup>3</sup>/<sub>4</sub>hf. Professors SAUVEUR and PETERS, assisted by Messrs. BOYLSTON and C. D. CRAWFORD. — General Metallurgy.

2 G.S., 10 Se., 21 Ju., 9 So., 9 Fr., 2 Sp. Total 53.

1<sup>3</sup>/<sub>4</sub>hf. Professor H. L. SMYTH, Asst. Professor RAYMER, and Mr. WEEKS. — Elements of Mining. Prospecting and exploring; breaking ground; hydraulic and open-pit mining; stamp-milling and ore-concentration.

8 Se., 12 Ju., 3 Fr. Total 23.

2. Professor H. L. SMYTH, Asst. Professor GRATON, and Mr. WEEKS. — Ore-deposits. Origin and occurrence.

1 Gr., 1 G.S., 3 Se., 4 Ju., 1 Fr. Total 10.

3<sup>1</sup>/<sub>4</sub>hf. Asst. Professor RAYMER, assisted by Mr. C. F. LEWIS. — Fire Assaying.

1 G.B., 1 G.S., 3 Se., 1 Ju., 1 Fr. Total 7.

4<sup>3</sup>/<sub>4</sub>hf. Asst. Professor C. H. WHITE, assisted by Mr. C. F. LEWIS. — Metallurgical Chemistry. The Analysis of Ores.

1 Se., 2 Ju. Total 3.

*For Undergraduates and Graduates :—*

7<sup>1</sup>/<sub>4</sub>. Professor H. L. SMYTH and Mr. WEEKS. — Metal and Coal Mining; Exploitation.

4 G.S., 3 Se. Total 7.

8<sup>3</sup>/<sub>4</sub>hf. Asst. Professor RAYMER. — Mining Plant.

2 G.S., 1 Se. Total 3.

10. Mr. WEEKS. — Mining. The study of mining operations.

4 Ju., 3 So., 2 Fr., 2 S. S. Total 11.

11<sup>1</sup>/<sub>4</sub>hf. Professor SAUVEUR, assisted by Messrs. BOYLSTON and C. D. CRAWFORD. — Metallurgy of Iron and Steel.

8 G.S., 7 Se., 5 Ju., 2 Fr. Total 22.

12<sup>3</sup>/<sub>4</sub>hf. Professor SAUVEUR, assisted by Mr. BOYLSTON. — Metallography.

6 G.S., 1 G.B., 2 Se., 1 Fr., 1 Sp. Total 11.

14<sup>3</sup>/<sub>4</sub>hf. Professor PETERS and Mr. WEEKS. — Metallurgy of Copper, Lead, Zinc, and the Minor Metals, and of the Precious Metals in connection with Copper and Lead.

7 G.S., 1 Se., 1 Sp. Total 9.

15<sup>3</sup>/<sub>4</sub>hf. Professor PETERS. — Metallurgy of Zinc, Nickel, Tin, Mercury, and the Minor Metals.

1 G.S., 1 Se., 1 Sp. Total 3.

17<sup>3</sup>/<sub>4</sub>. Asst. Professor RAYMER. — Ore-dressing, Concentration, and Milling.

4 G.S., 1 Sp. Total 5.

19. Asst. Professor C. H. WHITE. — Metallurgical Chemistry (advanced course).

5 G.S., 1 Se. Total 6.



**History 12a<sup>1</sup>hf.** Mr. TEMPERLEY. — English History from the Revolution of 1688 to the Reform of Parliament.

2 Gr., 5 Se., 12 Ju., 10 So., 8 Fr., 2 uC. Total 39.

**History 40<sup>1</sup>hf.** Dr. LORD. — History of France in the Seventeenth and Eighteenth Centuries.

3 Gr., 6 Se., 7 Ju., 1 So., 1 Fr., 1 uC. Total 19.

**History 14<sup>2</sup>hf.** Asst. Professor JOHNSTON. — France under Napoleon I.

3 Gr., 25 Se., 20 Ju., 6 So., 1 Fr., 1 Sp., 2 uC. Total 58.

**History 28.** Dr. LORD. — History of Modern Germany.

1 Gr., 1 Ju., 1 So., 1 Sp. Total 4.

**History 33<sup>2</sup>hf.** Asst. Professor JOHNSTON. — History of Italy from 1789-1870.

1 Gr., 6 Se., 5 Ju., 5 So. Total 17.

**History 19<sup>1</sup>hf.** Professor COOLIDGE. — The Eastern Question.

1 Gr., 13 Se., 12 Ju., 5 So., 1 Sp., 1 uC. Total 33.

**History 30<sup>1</sup>hf.** Mr. TEMPERLEY. — The Growth of the British Empire.

3 Gr., 7 Se., 8 Ju., 2 So., 1 Fr. Total 21.

**History 24a<sup>1</sup>hf.** Professor E. C. MOORE. — The History of the Christian Church in Europe from the Reformation to the end of the Eighteenth Century.

1 G.B., 9 Se., 17 Ju., 9 So., 3 Fr., 2 Di., 1 And. Total 42.

**History 24b<sup>2</sup>hf.** Professor E. C. MOORE. — The History of the Christian Church in Europe and of the Expansion of Christendom in the East during the Nineteenth Century. 11 Se., 18 Ju., 18 So., 8 Fr., 1 Sp., 5 Di. Total 61.

*Primarily for Graduates: —*

**History 29.** Professor COOLIDGE. — Selected Topics in the History of the Nineteenth Century: European Expansion in North Africa. 3 Gr. Total 3.

**History 48.** Dr. LORD. — General History of Russia (advanced course).

1 Gr. Total 1.

**History 39<sup>2</sup>hf.** Asst. Professor MERRIMAN. — Comparative Studies in the Institutions of Western Europe, 1800-1600 (England, France, Spain).

2 Gr., 1 Se. Total 3.

**History 50<sup>2</sup>hf.** Asst. Professor JOHNSTON. — Studies in the Political Literature of the Revolutionary Period in France and Italy. 1 Gr. Total 1.

*Courses of Research*

**History 20d.** Professor COOLIDGE and Asst. Professor JOHNSTON. — History of Continental Europe and of Asia in the Eighteenth and Nineteenth Centuries.

1 Gr., 1 Se. Total 2.

**History 20g.** Asst. Professor MERRIMAN. — Topics in the History of Spain in the Fifteenth and Sixteenth Centuries. 1 Gr. Total 1.

IV. AMERICAN HISTORY

*For Undergraduates and Graduates: —*

**History 10b<sup>2</sup>hf.** Professor CHANNING. — American History: The Formation of the Union (1760-1801). 3 Gr., 8 Se., 9 Ju., 17 So., 2 Sp., 4 uC. Total 43.

History 43b<sup>2</sup>hf. Professor CHANNING. — Selected Readings in American History. The Administrations of Washington and Adams (1789-1801).

1 Se., 1 Ju. Total 2.

History 17. Professor TURNER, assisted by Mr. BROOKE. — The History of the West. 18 Gr., 21 Se., 31 Ju., 17 So., 4 Fr., 1 Sp., 5 uC. Total 92.

History 13. Professor A. B. HART and Dr. HOLCOMBE, assisted by Messrs. S. E. MORISON and RYAN. — Constitutional and Political History of the United States (1815-1911).

4 Gr., 12 Se., 47 Ju., 28 So., 7 Fr., 3 Sp., 2 uC. Total 103.

*Primarily for Graduates: —*

History 23b<sup>2</sup>hf. Professor CHANNING. — Selected Topics in the Historical Development of American Institutions. Constitutional History of the Administrations of Washington and John Adams (1789-1801).

4 Gr., 1 Ju. Total 5.

History 44. Professor TURNER. — Selected Topics in the History of the West (1840-1850).

8 Gr. Total 8.

‡History 46 hf. Mr. W. C. FORD. — Manuscript Materials of American History.

2 Gr., 1 R. Total 3.

#### *Courses of Research*

History 20e. Professor CHANNING. — American History. 1 Gr. Total 1.

History 20k. Professor TURNER. — American History. 3 Gr. Total 3.

### V. ECONOMIC HISTORY

*For Undergraduates and Graduates: —*

Economics 6a<sup>1</sup>hf., 6b<sup>2</sup>hf., 11, 20a. Professor GAY. — (See Economics, pp. 64-65.)

### VI. CHURCH HISTORY

*History 5, 6, 7a, 24a, 24b, 26, and 20a are courses in Church History. In addition to these, the following courses in Andover Theological Seminary (offered Primarily for Graduates) were open to students in Harvard University: —*

History A2. Professor PLATNER. — History of Christian Doctrine.

1 Ju., 1 Di., 4 And. Total 6.

History A6. Professor PLATNER. — History of Early Christian Literature.

1 Di., 1 And. Total 2.

### VII. HISTORY OF RELIGIONS

*Primarily for Undergraduates: —*

History of Religions 10<sup>1</sup>hf. Professor PLATNER. — The Elements of Christianity.

8 Se., 12 Ju., 5 So., 4 Fr. Total 29.

*For Undergraduates and Graduates: —*

History of Religions 1<sup>1</sup>hf. Professor G. F. MOORE. — The Origin and Development of Religion. 1 Gr., 5 Se., 3 Ju., 1 So., 2 Di., 1 And. Total 13.

**History of Religions 2.** Professor G. F. MOORE. — History of Religions in Outline. — *First half-year*: The Religions of China and Japan, Egypt, Babylonia and Assyria, and the Western Semites (including Judaism and Mohammedanism). *Second half-year*: The Religions of India, Persia, the Greeks, Romans, Germans, and Celts; Christianity.

8 Se., 4 Ju., 1 Fr., 15 Di., 2 And. Total 25.

*Primarily for Graduates*: —

**History of Religion 3<sup>1</sup>hf.** Professors KITTREDGE and F. N. ROBINSON. — Germanic and Celtic Religions. 8 Gr., 1 Se., 1 Di. Total 5.

#### *Course of Research*

**History of Religions 20.** Professor G. F. MOORE. — Topics in Jewish Theology and Confucian Ethics. 1 Gr., 1 Di. Total 2.

### Government

#### I. INTRODUCTORY

*Primarily for Undergraduates*: —

**Government 1.** Asst. Professor MUNRO, assisted by Messrs. CLEARY, DAVIS, S. C. McLEOD, COTTRELL, KINCAID, and R. H. HOLT. — Constitutional Government. 1 Se., 2 Ju., 130 So., 328 Fr., 2 Sp., 16 uC. Total 479.

#### II. MODERN GOVERNMENT

*For Undergraduates and Graduates*: —

**Government 3a<sup>1</sup>.** Dr. HOLCOMBE. — Party Government.

1 Gr., 12 Se., 7 Ju., 9 So., 4 Fr., 1 uC. Total 34.

**Government 17.** Asst. Professor MUNRO, assisted by Mr. HULL. — Municipal Government. 4 Gr., 10 Se., 13 Ju., 22 So., 5 Fr., 1 Ext. Total 55.

**Government 32a<sup>1</sup>hf.** Dr. HOLCOMBE. — Public Ownership and Control.

2 Gr., 1 G.S., 25 Se., 32 Ju., 22 So., 7 Fr., 2 uC. Total 91.

**Government 32b<sup>1</sup>hf.** Dr. HOLCOMBE. — Selected Problems in Public Ownership and Control. 4 Gr., 7 Se., 7 Ju., 1 So., 1 uC. Total 20.

*Primarily for Graduates*: —

**Government 7.** Mr. MATTHEWS and Asst. Professor MUNRO. — Problems of Municipal Administration in Europe and America.

5 Gr., 2 Se., 4 Ju. Total 11.

#### *Courses of Research*

**Government 20a.** Asst. Professor MUNRO. — Selected Topics in Municipal Government. 1 Gr. Total 1.

**Government 20c.** Professor A. B. HART. — American Institutions, National, State, Municipal and Insular. 5 Gr. Total 5.

### III. LAW AND POLITICAL THEORY

*For Undergraduates and Graduates*: —

**Government 5.** Asst. Professor McILWAIN. — The Roman Law: its History, Principles, and Influence on European Institutions.

9 Gr., 3 Se., 9 Ju., 2 So., 1 uC. Total 24.

Government 6. Mr. YEOMANS. — Theories of the State and of Government.  
9 Gr., 3 Se., 5 Ju., 1 uC., 1 Law. Total 19.

Government 25 <sup>1</sup>/<sub>2</sub>. Mr. JOSEPH WARREN. — History and System of the Common Law.  
2 Gr., 24 Se., 6 Ju., 2 So., 2 And. Total 36.

*Primarily for Graduates: —*

Government 19. Messrs. YEOMANS and DALLINGER. — American Constitutional Law: A study of constitutional principles and limitations throughout the United States.  
4 Gr., 1 Se., 1 Ju. Total 6.

#### IV. INTERNATIONAL LAW AND DIPLOMACY

*For Undergraduates and Graduates: —*

Government 4. Professor G. G. WILSON, assisted by Mr. PRIEST. — Elements of International Law. 8 Gr., 11 Se., 29 Ju., 1 So., 3 Sp., 1 uC. Total 53.

*Primarily for Graduates: —*

Government 14. Professors A. B. HART and G. G. WILSON. — American Diplomacy: Treaties; Application of International Law; Foreign Policy.  
7 Gr., 5 Ju. Total 12.

Government 23. Professor G. G. WILSON. — Selected Cases in International Law.  
7 Gr., 3 Se., 2 Ju., 2 Law. Total 14.

#### *Course of Research*

Government 20c. Professor G. G. WILSON. — International Law.  
4 Gr., 3 Se. Total 7.

#### Economics

*Primarily for Undergraduates: —*

1. Professor TAUSSIG, assisted by Dr. E. E. DAY, and Messrs. JONES, BALCOM, J. S. DAVIS, BURBANK, and JAY MORRISON. — Principles of Economics.  
1 Gr., 19 Se., 35 Ju., 252 So., 54 Fr., 4 Sp., 23 uC. Total 438.

#### I. ECONOMIC THEORY AND METHOD

*For Undergraduates and Graduates: —*

2. Professor TAUSSIG. — Economic Theory.  
23 Gr., 11 Se., 16 Ju., 2 So., 1 Sp., 1 Di. Total 54.

4. Professor RIPLEY. — Statistics. Theory, method, and practice.  
4 Gr., 1 G.B., 6 Se., 9 Ju. Total 20.

14a <sup>1</sup>/<sub>2</sub>. Professor CARVER, assisted by Mr. A. W. LAHRE. — The Distribution of Wealth. 6 Gr., 32 Se., 40 Ju., 11 So., 1 Fr., 2 Sp., 2 uC. Total 94.

14b <sup>2</sup>/<sub>2</sub>. Professor CARVER. — Methods of Social Reform. Socialism, Communism, the Single Tax, etc.  
5 Gr., 22 Se., 25 Ju., 9 So., 2 Sp., 2 uC. Total 65.

29 <sup>1</sup>/<sub>2</sub>. Dr. RAPPAUD. — Socialism and the Social Movement in Europe.  
3 Gr., 15 Se., 20 Ju., 3 So. Total 41.

*Primarily for Graduates: —*

13 <sup>1</sup>/<sub>2</sub>. Professor CARVER. — Methods of Economic Investigation.  
2 Gr., 1 Ju., 1 So. Total 4.

- ‡15. Professor BULLOCK. — History and Literature of Economics to the year 1848. 6 Gr. Total 6.
22. Professor GAY. — French and German Economists of the Nineteenth Century. 5 Gr. Total 5.

## II. ECONOMIC HISTORY

### *For Undergraduates and Graduates:—*

- 6a<sup>1</sup>hf. Professor GAY, assisted by Mr. KLEIN. — European Industry and Commerce in the Nineteenth Century. 22 Gr., 5 Se., 28 Ju., 6 So., 2 Fr., 1 uC., 1 Ext. Total 65.
- 6b<sup>2</sup>hf. Professor GAY, assisted by Mr. KLEIN. — Economic and Financial History of the United States. 19 Gr., 11 Se., 48 Ju., 12 So., 3 Fr., 1 uC. Total 94.
11. Professor GAY. — Modern Economic History of Europe. 3 Gr., 1 Fr. Total 4.

## III. APPLIED ECONOMICS

### *For Undergraduates and Graduates:—*

- 5<sup>1</sup>hf. Professor RIPLEY, assisted by Dr. DEWING. — Economics of Transportation. 4 Gr., 23 Se., 54 Ju., 14 So., 3 Fr., 1 Ext. Total 99.
- 7a<sup>1</sup>hf. Professor BULLOCK. — Introduction to Public Finance. 3 Gr., 5 Se., 11 Ju., 4 So., 1 uC. Total 24.
- 7b<sup>2</sup>hf. Professor BULLOCK. — The Theory and Methods of Taxation. 2 Gr., 10 Se., 16 Ju., 9 So. Total 37.
8. Dr. E. E. DAY, assisted by Mr. YORK. — Money, Banking, and Commercial Crises. 7 Gr., 16 Se., 70 Ju., 22 So., 4 Fr., 1 uC. Total 120.
- 9a<sup>1</sup>hf. Professor RIPLEY, assisted by Mr. HESS. — Problems of Labor. 3 Gr., 23 Se., 35 Ju., 8 So., 1 Di. Total 70.
- 9b<sup>2</sup>hf. Professor RIPLEY, assisted by Dr. DEWING. — Economics of Corporations. 9 Gr., 1 G.S., 41 Se., 72 Ju., 14 So., 2 Fr., 1 uC. Total 140.
- 23<sup>2</sup>hf. Professor CARVER. — Economics of Agriculture. With special reference to American conditions. 4 Gr., 36 Se., 44 Ju., 9 So., 1 Sp., 1 uC. Total 95.
- 30<sup>1</sup>hf. Dr. DEWING. — The Financial Aspects of Industrial Combinations. 1 G.B., 8 Se., 9 Ju., 1 So. Total 19.
- Primarily for Graduates:—*
16. Professor BULLOCK. — Public Finance (advanced course). 11 Gr., 1 Se., 1 Ju. Total 13.

## IV. COURSES PREPARING FOR A BUSINESS CAREER

### *For Undergraduates and Graduates:—*

18. Asst. Professor COLE, assisted by Messrs. STONER and JOHNSON. — Principles of Accounting. 8 Gr., 7 G.S., 45 G.B., 129 Se., 68 Ju., 1 Sp., 3 Law. Total 261.
- 21<sup>1</sup>hf. Professor WYMAN, assisted by Messrs. HUGHES and JOHNSON. — The Law of Competition and Combination. 2 Gr., 1 G.S., 107 Se., 44 Ju., 2 Sp. Total 156.

## V. SOCIOLOGY

*For Undergraduates and Graduates:—*

Economics 3. Professor CARVER, assisted by Mr. BRISTOL. — Principles of Sociology. Theories of Social Progress.

13 Gr., 24 Se., 35 Ju., 8 So., 2 Fr., 1 Sp., 5 uC., 2 Di. Total 90.

Anthropology 12 <sup>1</sup>/<sub>2</sub>f. (See Anthropology, p. 66.)

Social Ethics 1 <sup>1</sup>/<sub>2</sub>f., 2 <sup>2</sup>/<sub>3</sub>f., 4 <sup>1</sup>/<sub>2</sub>f., 6 <sup>2</sup>/<sub>3</sub>f., 7 <sup>1</sup>/<sub>2</sub>f., §20a, §20b, 20c. (See Social Ethics, p. 69.)

## VI. COURSES OF RESEARCH IN ECONOMICS

20a. Professor GAY. — The Economic History of England. 1 Gr. Total 1.

§20b. Professor CARVER. — Economic Theory. 1 Gr. Total 1.

20c. Professor RIPLEY. — Principles of Corporation Finance. 8 Gr. Total 8.

20d. Professor TAUSSIG. — The Economic History of the United States, with special reference to Tariff Legislation. 2 Gr. Total 2.

20e. Professor BULLOCK. — American Taxation and Finance. 1 Gr. Total 1.

20g. Asst. Professor SPRAGUE. — Banking. 1 Gr., 1 Ju. Total 2.

*The Seminary in Economics*

Meetings were held by instructors and advanced students for the presentation of the results of investigation.

## Education

*For Undergraduates and Graduates:—*

A <sup>1</sup>/<sub>2</sub>f. (formerly 2a). Asst. Professor HOLMES. — Principles and Problems of Contemporary Education.

6 Gr., 1 G.B., 8 Se., 11 Ju., 2 So., 1 Fr., 1 And. Total 30.

1. Asst. Professor A. O. NORTON. — History of Educational Practices and Theories. 7 Gr., 2 Se., 9 Ju., 1 Fr., 1 Sp. Total 20.

5a <sup>1</sup>/<sub>2</sub>f. Asst. Professor A. O. NORTON. — Modern Theories of Education. Critical study of recent views.

12 Gr., 1 Se., 2 Ju., 1 Fr., 2 Di. Total 18.

5b <sup>2</sup>/<sub>3</sub>f. Asst. Professor A. O. NORTON. — The Education of the Individual. Study and treatment of both unusual and normal types.

11 Gr., 3 Se., 3 Ju., 2 Fr. Total 19.

6a <sup>1</sup>/<sub>2</sub>f. Asst. Professor HOLMES. — Educational Theory in the Early Nineteenth Century. Froebel. Constructive discussion of educational aims.

1 Gr., 2 Ju. Total 3.

6b <sup>2</sup>/<sub>3</sub>f. Asst. Professor HOLMES. — Educational Theory in the Early Nineteenth Century. Pestalozzi and Herbart. Constructive discussion of educational methods.

2 Gr., 1 Ju. Total 3.

*Primarily for Graduates:—*

8. Dr. F. E. SPAULDING (Superintendent of Schools, Newton).—Organization and Management of State and City Schools and School Systems. Duties and opportunities of superintendents and principals. Visits to schools, with special reference to the duties of supervising officers. Experimental study of problems in school administration.

8 Gr., 1 Se., 1 uC., 1 R. Total 11.

- 8b<sup>1</sup>/<sub>2</sub>f. Mr. WILLIAM ORR (Deputy Commissioner of Education, Commonwealth of Massachusetts) and Asst. Professor HOLMES.—Secondary Education: Public High Schools, Endowed and Private Schools. Visits to Schools. Practice teaching.

10 Gr., 8 Se., 1 So. Total 19.

- 8c. Asst. Professor HOLMES.—Elementary Education. Programmes of study, administration, methods. Visits to schools. Practice teaching during the second half-year.

4 Gr., 2 Se. Total 6.

*Seminary Course*

- 120b. Asst. Professor A. O. NORTON.—Seminary in the History of Education.

4 Gr., 1 R. Total 5.

*Anthropology**Primarily for Undergraduates:—*

1. Dr. TOZZER, assisted by Mr. KIDDER.—General Anthropology.

15 Se., 25 Ju., 46 So., 7 Fr., 1 Sp., 2 uC. Total 96.

*For Undergraduates and Graduates:—*

5. Asst. Professor DIXON and Drs. FARABEE and TOZZER.—American Archaeology and Ethnography.

1 Gr., 3 Se., 1 So. Total 5.

2. Dr. FARABEE.—Somatology.

2 Gr., 1 Se. Total 3.

- 4<sup>1</sup>/<sub>2</sub>f. Dr. FARABEE.—Prehistoric European Archaeology and European Ethnography.

1 Gr., 2 Se., 2 Ju., 2 So. Total 7.

- 7<sup>1</sup>/<sub>2</sub>f. Asst. Professor DIXON.—Ethnography of Oceania.

1 Gr., 2 Se., 1 Sp. Total 4.

- 11<sup>1</sup>/<sub>2</sub>f. Asst. Professor DIXON.—Ethnography of Asia.

2 Gr., 4 Se., 1 So., 1 Sp. Total 8.

- 12<sup>1</sup>/<sub>2</sub>f. Dr. TOZZER.—Primitive Sociology, a History of Institutions.

6 Gr., 4 Se., 2 Ju., 1 Fr., 1 Sp. Total 14.

*Primarily for Graduates:—*

- 18<sup>1</sup>/<sub>2</sub>f. Asst. Professor DIXON.—American Indian Languages. Discussion and study of selected texts.

1 Gr. Total 1.

- 9<sup>1</sup>/<sub>2</sub>f. Dr. TOZZER.—Archaeology and Hieroglyphic Systems of Central America.

1 Sp. Total 1.

*Courses of Research*

- 120a. Asst. Professor DIXON.—American Archaeology and Ethnology.

1 Gr., 1 Sp. Total 2.

- 120b<sup>2</sup>. Dr. FARABEE.—Advanced Somatology.

1 Gr. Total 1.

- 120d. Asst. Professor DIXON.—General Ethnology.

1 Gr. Total 1.

## GROUP IV

## Philosophy

*Primarily for Undergraduates:—*

## A-E. INTRODUCTION TO PHILOSOPHY

**A<sup>1</sup>hf.** Professor PALMER. — History of Ancient Philosophy.

2 Se., 27 Ju., 111 So., 116 Fr., 1 Sp., 15 uC., 2 Ext. Total 274.

**B<sup>2</sup>hf.** Professor CUSHMAN (Tufts College). — History of Modern Philosophy.

1 Se., 11 Ju., 48 So., 55 Fr., 10 uC., 2 Di., 1 Ext. Total 128.

**C<sup>1</sup>hf.** Professor ROYCE. — Logic.

1 Gr., 1 Se., 20 Ju., 28 So., 32 Fr., 3 Sp., 13 uC. Total 98.

**D<sup>1</sup>hf.** Asst. Professor R. B. PERRY. — General Problems of Philosophy.

1 Gr., 2 Se., 9 Ju., 24 So., 29 Fr., 2 Sp., 2 uC. Total 69.

**E<sup>2</sup>hf.** Professor MÜNSTERBERG. — Psychology.

1 Gr., 1 G.S., 3 Se., 85 Ju., 121 So., 131 Fr., 1 Sp., 28 uC., 1 And., 1 Ext.

Total 373.

*For Undergraduates and Graduates:—*

**3<sup>2</sup>hf.** Asst. Professor G. P. ADAMS (University of California). — Philosophy of Nature, with Especial Reference to Man's Place in Nature. Conceptions of nature in the light of moral and religious interests.

10 Se., 9 Ju., 11 So., 2 Fr., 1 uC. Total 33.

**4.** Professor PALMER. — Ethics. The theory of morals, considered constructively.

15 Gr., 13 Se., 25 Ju., 7 So., 3 Fr., 1 uC., 4 Di., 6 And., 1 Ext. Total 75.

**5a<sup>1</sup>hf.** (formerly 22). Professor SANTAYANA. — Metaphysics. The order of knowledge and the order of nature.

7 Gr., 9 Se., 10 Ju., 2 Sp., 1 uC., 1 Di. Total 30.

**5b<sup>2</sup>hf.** Professor FITZ (Indiana University). — Metaphysics. The fundamental problems and conceptions of theoretical philosophy. — Idealism and realism, intellectualism and mysticism, in their relations.

5 Gr., 2 Se., 10 Ju., 1 So. Total 18.

**6a<sup>1</sup>hf.** (formerly 19). Professor E. C. MOORE. — Philosophy of Religion. — The Nature of Religion. 3 Gr., 5 Se., 5 Ju., 4 Di., 1 Ext. Total 18.

**6b<sup>2</sup>hf.** (formerly 19). Professor E. C. MOORE. — Philosophy of Religion. — The Truths of Religion.

8 Se., 14 Ju., 8 So., 2 Fr., 3 Sp., 2 uC., 2 Di., 2 And., 1 Ext. Total 42.

**7<sup>1</sup>hf.** (formerly 16). Professor FENN. — Theism. (Courses 6 and 7 are also announced by the Faculty of Divinity.)

2 Gr., 1 Se., 7 Di., 2 And. Total 12.

**8** (formerly 15). Professor ROYCE and Professor FITZ (Indiana University). — Advanced Logic. Modern doctrines regarding the thinking process and regarding the principles of the exact sciences. — The relations of deduction and induction. — Outlines of a theory of knowledge.

10 Gr., 2 Ju., 2 Di., 2 R. Total 16.

**10<sup>1</sup>hf.** Professor SANTAYANA. — Philosophy of Art.

6 Gr., 13 Se., 17 Ju., 7 So., 3 Fr., 1 Sp., 2 uC. Total 49.



- 11 (formerly 18). Asst. Professor WOODS. — Philosophical Systems of India, with special reference to Vedanta, Sankhya, and Yoga.  
2 Gr., 1 Se., 1 Ju., 2 Di. Total 6.
12. Asst. Professor WOODS. — Greek Philosophy, with especial reference to Plato. 13 Gr., 3 Se., 5 Ju., 2 So., 1 Di., 1 And. Total 25
- 14a<sup>2</sup>hf. (formerly 11a). Asst. Professor G. P. ADAMS (University of California) — Descartes, Spinoza, and Leibnitz.  
7 Gr., 3 Ju., 1 uC., 1 And. Total 12.
- 15<sup>1</sup>hf. (formerly 8). Professor ROYCE. — The Kantian Philosophy.  
11 Gr., 1 Se., 1 Ju., 1 So., 5 Di., 2 R. Total 21.
- 16<sup>2</sup>hf. Professor FITE (Indiana University). — Representative Philosophical Thinkers of the Nineteenth Century. Personal attitudes in philosophy and literature. 5 Gr., 6 Se., 10 Ju., 1 So., 1 Sp., 2 uC. Total 25.
- 17<sup>1</sup>hf. Professor E. C. MOORE. — History of Christian Thought since Kant.  
2 Se., 1 Sp., 7 Di., 3 And. Total 13.
- 18<sup>1</sup>hf. (formerly 24). Asst. Professor R. B. PERRY. — Present Philosophical Tendencies. A brief survey of contemporary Materialism, Idealism, Pragmatism, and Realism. 11 Gr., 8 Se., 11 Ju., 1 So., 3 Di. Total 34.
- 19a<sup>2</sup>hf. (formerly 7a). Asst. Professor G. P. ADAMS (University of California). — History of Ethics. — The Early English Moralists. Hobbes, the Cambridge Platonists, Shaftesbury, Butler, and Adam Smith.  
3 Gr., 2 Ju., 2 So. Total 7.
- 21<sup>1</sup>hf. (formerly 14). Dr. LANGFELD. — Experimental Psychology (elementary laboratory course). 11 Gr., 4 Se., 7 Ju., 1 So. Total 23.
- 22<sup>2</sup>hf. (formerly 2). Dr. LANGFELD. — Advanced Psychology.  
15 Gr., 4 Se., 7 Ju., 2 So., 2 Fr., 1 Di. Total 31.
- 26a<sup>1</sup>hf. (formerly 13a). Asst. Professor YERKES. — Comparative Psychology. — Mental Development in the Race. 13 Gr., 1 Se., 5 Ju., 2 So. Total 21.
- 27<sup>2</sup>hf. (formerly 21a). Asst. Professor YERKES. — Animal Psychology. A study of forms of activity and consciousness in the animal kingdom.  
2 Gr., 1 G.S., 1 Se. Total 4.
- 28<sup>2</sup>hf. (formerly 6). Asst. Professor YERKES. — Educational Psychology. The psychological basis of educational practices.  
11 Gr., 3 Se., 4 Ju., 1 So., 1 Fr., 1 Sp., 1 Di. Total 22.

*Primarily for Graduates: —*

*Courses of Special Study*

- ‡30a. Professor MÜNSTERBERG, Asst. Professor YERKES, and Dr. LANGFELD. — Psychological Laboratory. Experimental investigations in Human and Animal Psychology by advanced students. 12 Gr., 3 R. Total 15.
- 20b. Professor MÜNSTERBERG. — Applied Psychology with special reference to Education, Jurisprudence and Medicine.  
11 Gr., 2 Se., 2 Di., 1 And. Total 16.
- ‡30c. Professors ROYCE and SOUTHWARD. — Seminary in Logic. A Comparative Study of Various Types of Scientific Method. 8 Gr., 4 R. Total 12.

- ‡20d. Professor PALMER. — Seminary in Ethics. The Systematization of Ethics.  
9 Gr., 2 Di., 1 R. Total 12.
- 20e 1/2. Asst. Professor R. B. PERRY. — Seminary in the Theory of Knowledge.  
Ideas and their objects. 7 Gr., 1 Se., 2 Di., 1 R. Total 11.
- ‡20g. Asst. Professor YERKES. — Seminary in Animal Psychology. The history  
of the problems and methods of animal psychology.  
1 Gr., 1 R. Total 2.

### The Classics

#### Primarily for Graduates

Greek 8 and Latin 8. (See The Classics, p. 84.)

### Social Ethics

#### For Undergraduates and Graduates: —

- 1 2/3. Professor PEABODY, Drs. FORD and FOERSTER. — Social Problems in  
the light of Ethical Theory.  
3 Gr., 11 Se., 12 Ju., 8 So., 2 Fr., 3 Di., 3 And., 1 Ext. Total 48.
- 2 2/3. Dr. BRACKETT. — Practical Problems of Social Service: Public Aid,  
Charity, and Neighborhood Work.  
2 Gr., 4 Se., 5 Ju., 1 Sp., 1 uC., 1 Di. Total 14.
- 4 1/2. Selected Topics in Social Ethics.  
Dr. BRACKETT. — The Ethics of Public Aid and Private Charity.  
Dr. FORD. — The Ethical Aspects of Industrial Coöperation.  
Dr. FOERSTER. — The Ethics of Immigration.  
2 Gr., 2 Se., 5 Ju., 1 Di. Total 10.
- 6 2/3. Dr. FOERSTER. — Social Amelioration in Europe.  
7 Gr., 5 Se., 7 Ju. Total 19.
- 7 1/2. Dr. FORD. — Rural Social Development.  
1 Gr., 8 Se., 7 Ju., 1 Fr. Total 17.

#### Primarily for Graduates: —

#### Courses of Research

- ‡20a. Professor PEABODY. — Seminary of Social Ethics. The History of Social  
Ethics from Fichte to Tolstoi.  
5 Gr., 2 Se., 3 Di., 2 And., 1 R. Total 18.
- ‡20b. Professor PEABODY. — Special Researches in Social Ethics.  
1 Gr., 1 Di. Total 2.
- 20c. Dr. BRACKETT. — The School for Social Workers.  
4 Gr., 1 Se., 1 Ext. Total 6.

### Mathematics

#### Primarily for Undergraduates: —

- A. Professor OSGOOD, assisted by Messrs. CUTTING, EDWARDS, and A. L. MILLER.  
— Trigonometry, Analytic Geometry, Introduction to the Calculus.  
1 G.S., 3 Ju., 3 So., 77 Fr., 3 uC. Total 87.
- B. (formerly F). Asst. Professor BOUTON and Dr. DUNHAM JACKSON. — Trig-  
onometry and Plane Analytic Geometry.  
2 Se., 4 Ju., 10 So., 40 Fr., 1 Sp. Total 57.

*C.* Asst. Professor COOLIDGE, assisted by Messrs. CATER and BEATLEY. — Plane and Solid Analytic Geometry. 2 Ju., 8 So., 69 Fr., 4 uC. Total 88.

*D<sup>1</sup>hf.* Mr. DONAHUE. — Algebra. 3 Se., 10 Ju., 7 So., 89 Fr., 1 uC. Total 60.

*E<sup>1</sup>hf.* Mr. DONAHUE. — Solid Geometry. 4 Ju., 8 So., 27 Fr. Total 39.

*K<sup>3</sup>hf.* (formerly *A*). Mr. DONAHUE. — Logarithms; Plane and Spherical Trigonometry. 9 Ju., 9 So., 24 Fr. Total 42.

*L<sup>1</sup>hf.* (formerly Engineering 1*d*). Mr. DONAHUE. — Plane Analytic Geometry. 1 Se., 7 So., 11 Fr., 1 Sp., 1 uC. Total 21.

*G<sup>3</sup>hf.* Asst. Professor BOUTON. — Descriptive Geometry. 1 G.S., 4 Se., 4 Ju., 5 So., 4 Fr. Total 18.

2. Professors BYERLY and BÔCHER, and Messrs. GAYLORD, DONAHUE, and EITTLINGER. — Differential and Integral Calculus (first course). 1 Gr., 1 G.B., 2 G.S., 8 Se., 88 Ju., 62 So., 5 Fr., 7 uC. Total 124.

4. Asst. Professor H. N. DAVIS. — The Elements of Mechanics. 4 Gr., 2 G.S., 16 Se., 29 Ju., 8 So., 1 Sp. Total 60.

*For Undergraduates and Graduates: —*

3. Professor BYERLY. — Introduction to Modern Geometry and Modern Algebra. 4 Gr., 2 Ju., 2 So., 1 Sp. Total 9.

5. Professor OSGOOD. — Differential and Integral Calculus (second course). 6 Gr., 5 Se., 10 Ju., 2 So., 3 uC. Total 26.

9. Asst. Professor COOLIDGE. — Probability. 1 Gr., 1 Se., 4 Ju., 1 Sp. Total 7.

18<sup>1</sup>*hf.* Asst. Professor BOUTON. — The Elementary Theory of Differential Equations. 5 Gr., 1 G.S., 2 Ju. Total 8.

6<sup>1</sup>*hf.* Professor BÔCHER. — Vector Analysis. 5 Gr., 1 G.S., 3 Se., 1 Ju. Total 10.

8<sup>3</sup>*hf.* Professor MAX MASON (University of Wisconsin). — Dynamics of Rigid and Elastic Bodies. 4 Gr., 1 G.S., 1 Se., 1 Ju. Total 7.

*Primarily for Graduates: —*

12<sup>1</sup>*hf.* Dr. DUNHAM JACKSON. — Infinite Series and Products. 2 Gr., 2 Se., 2 Ju., 1 uC., 1 R. Total 8.

†13. Professor OSGOOD. — The Theory of Functions (introductory course). 7 Gr., 1 Se., 1 uC., 1 R. Total 10.

†14a<sup>3</sup>*hf.* Dr. DUNHAM JACKSON. — Algebra. The properties of polynomials; invariants. 5 Gr., 4 Se., 1 Ju., 1 uC., 1 R. Total 12.

†24. Dr. DUNHAM JACKSON. — The Theory of Numbers, including the Theory of Ideals. 2 Gr., 3 Se., 1 R. Total 6.

22<sup>1</sup>*hf.* Associate Professor G. A. BLISS (University of Chicago). — Differential Geometry of Curves and Surfaces. 4 Gr. Total 4.

†26. Asst. Professor COOLIDGE. — Line Geometry. 3 Gr., 2 Se., 1 Ju. Total 6.

10. Professors BYERLY and B. O. PEIRCE. — Trigonometric Series. Introduction to Spherical Harmonics. The Potential Function. 9 Gr., 2 G.S., 1 Se., 1 Sp., 1 R. Total 14.

- ‡11<sup>1</sup>/<sub>2</sub>. Professor B. O. PEIRCE. — Hydromechanics. 4 Gr., 1 G.S. Total 5.  
 ‡15. Asst. Professor BOUTON. — Differential Equations. With an introduction to Lie's theory of continuous groups. 7 Gr. Total 7.  
 ‡21<sup>1</sup>/<sub>2</sub>. Professor BÔCHER. — Finite Differences and Difference Equations. 5 Gr., 1 Se., 1 uC. Total 7.  
 30<sup>1</sup>/<sub>2</sub>. Associate Professor G. A. BLISS (University of Chicago). — Partial Differential Equations. 8 Gr. Total 8.  
 34<sup>3</sup>/<sub>4</sub>. Professor MAX MASON (University of Wisconsin). — The Electron and the Electro-Magnetic Field. 1 G.S., 2 Gr. Total 3.

*Courses of Reading and Research*

- ‡20c. Professor OSGOOD. — Topics in the Theory of Functions. 2 Gr. Total 2.  
 ‡20d. Professor BÔCHER. — Topics in Analysis and Algebra. 1 Gr. Total 1.  
 ‡20e. Asst. Professor BOUTON. — Topics in the Theory of Point-Transformations. 1 Gr. Total 1.  
 ‡20f. Asst. Professor COOLIDGE. — Topics in Higher Geometry. 3 Gr. Total 3.

OUT OF GROUP

Business

I. ACCOUNTING

Economics 18. Asst. Professor COLE. (See Economics, p. 64.)

Business 1. Asst. Professor COLE. — Accounting Practice.

4 Gr., 28 G.B. Total 27.

2. Asst. Professor COLE. — Accounting Problems. 1 G.B. Total 1.

II. COMMERCIAL LAW

5. Asst. Professor SCHAUB. — Commercial Contracts.

2 Gr., 34 G.B. Total 36.

6. Asst. Professor SCHAUB. — Law of Business Associations.

1 Gr., 6 G.B. Total 7.

7<sup>1</sup>/<sub>2</sub>. Asst. Professor SCHAUB. — Law of Banking Operations.

5 G.B. Total 5.

III. COMMERCIAL ORGANIZATION

10. Mr. CHERINGTON. — Economic Resources and Commercial Organization of the United States. 1 Gr., 32 G.B., 1 Se., 1 Fr. Total 35.

11. Mr. CHERINGTON. — Problems of Commercial Organization.

22 G.B. Total 22.

12<sup>3</sup>/<sub>4</sub>. Dr. RAPPAUD. — Economic Resources and Commercial Policy of the Chief European States. 3 G.B., 1 G.S. Total 4.

14<sup>3</sup>/<sub>4</sub>. Mr. MARTIN. — Economic Resources and Commercial Organization of Central and South America. 7 G.B. Total 7.

15<sup>3</sup>/<sub>4</sub>. Mr. SHAW, assisted by Mr. MARTIN. — Business Policy.

11 G.B. Total 11.

16. Mr. CHERINGTON. — Commercial Organization (advanced course).

2 G.B. Total 2.

## IV. INDUSTRIAL ORGANIZATION

- 17a <sup>1</sup>/<sub>hf</sub>. Professor GAY and Mr. GUNN, and the following lecturers: Messrs. M. W. ALEXANDER, C. G. L. BARTH, C. C. BATCHELDER, M. L. COOKE, CHARLES DAY, W. C. FISH, H. L. GANTT, C. B. GOING, H. K. HATHAWAY, W. J. HOGGSON, J. T. LINCOLN, W. C. REDFIELD, RUSSELL ROBB, J. E. STERRETT, and F. W. TAYLOR. — Industrial Organization. 1 Gr., 2 G.S., 39 G.B. Total 42.
- 17b <sup>3</sup>/<sub>hf</sub>. Mr. FEIKER and others. — Industrial Organization. 16 G.B. Total 16.
- 19 <sup>1</sup>/<sub>hf</sub>. Messrs. C. G. L. BARTH, M. L. COOKE, H. K. HATHAWAY, and S. E. THOMPSON. — The Practice of Scientific Management. 5 G.B. Total 5.
- 20c. Messrs. H. L. BAKER, A. E. BARTER, H. L. BULLEN, J. C. DANA, C. W. DAVIS, A. W. ELSON, A. W. FINLAY, E. B. HACKETT, H. B. HATCH, W. C. HUEBNER, F. T. HULL, H. L. JOHNSON, C. C. LANE, C. E. MASON, J. H. McFARLAND, H. M. PLIMPTON, C. SCHWEINLER, W. S. TIMMIS, J. A. ULLMAN, D. B. UPDIKE, and W. B. WHEELWRIGHT. — An Introduction to the Technique of Printing. 2 G.B. Total 2.
- 20d. Messrs. C. C. LANE and BRUCE ROGERS. — Business Practice in Printing (advanced course). 1 G.B., 1 Sp. Total 2.

## V. BANKING AND FINANCE

21. Asst. Professor SPRAGUE. — Banking. 1 Gr., 11 G.B. Total 12.
- 22 <sup>1</sup>/<sub>hf</sub>. Asst. Professor SPRAGUE. — Banking (advanced course). 2 G.B. Total 2.
- 24 <sup>3</sup>/<sub>hf</sub>. Mr. J. F. MOORS. — Investments. 1 Gr., 39 G.B., 2 G.S., 1 Instr. Total 43.
25. Asst. Professor SPRAGUE. — Corporation Finance. 12 G.B. Total 12.

## VI. TRANSPORTATION

- 27 <sup>1</sup>/<sub>hf</sub>. Asst. Professor CUNNINGHAM. — Railroad Organization and Finance. 1 Gr., 1 G.S., 5 G.B., 1 Law. Total 8.
28. Asst. Professor CUNNINGHAM. — Railroad Operation. 5 G.B. Total 5.
29. Mr. RICH. — The Railroad and the Shipper: The Theory and Practice of Rate Making, with special reference to the Interstate Commerce Act. 2 G.B. Total 2.
- 30 <sup>3</sup>/<sub>hf</sub>. Mr. HOBBS. — Railroad Accounting. 7 G.B. Total 7.
31. Mr. RICH. — Railroad Rate Making (advanced course). 2 G.B. Total 2.

## VII. INSURANCE

- 35a <sup>1</sup>/<sub>hf</sub>. Mr. MEDLICOTT. — Fire Insurance. 1 Gr., 6 G.B. Total 7.
- 35b <sup>3</sup>/<sub>hf</sub>. Mr. DOW. — Life Insurance. 5 G.B., 1 Sp. Total 6.

## Forestry

- 1a. Asst. Professor FISHER. — Silviculture. Silvical Studies. Forest description and treatment. Forest regions of the United States. Forest influences and the practice of forestry. 10 G.S. Total 10.

- 1b. Asst. Professor JACK. — Forest Planting and Nursery Work.  
11 G.S. Total 11.
2. Asst. Professor CARTER. — Forest Measurements. 12 G.S. Total 12.
3. Asst. Professor JACK. — Dendrology. Systematic study of American species of commercial trees. 11 G.S. Total 11.
4. Asst. Professor JACK. — Forest Protection. Diseases of trees, forest fires, etc. 6 G.S. Total 6.
5. Asst. Professor CARTER. — Forest Policy and Administration. 6 G.S. Total 6.
6. Mr. BAILEY. — Lumbering and Woods Practice. 5 G.S. Total 5.
7. Asst. Professor CARTER. — Forest Management. Theory of Forest Valuation and Regulation. Construction of a Complete Working Plan. 11 G.S. Total 11.
- 8 <sup>1</sup>/<sub>4</sub>f. (See Botany, p. 53.)
9. Mr. BAILEY. — Forest Products. Gross features, properties, and utilization of woods. 14 G.S. Total 14.
10. Asst. Professor FISHER. — Forest Operation. 6 G.S. Total 6.
11. Asst. Professor CARTER. — Forest Investigations. Methods of Research in Problems of Technical Forestry. 6 G.S. Total 6.
12. Mr. BAILEY. — Forest Surveying and Timber Estimating. 5 G.S. Total 5.
13. Messrs. NICHOLS and MERRIAM. — Construction Engineering. 8 G.S. Total 8.
- Engineering 4a. (See Engineering, p. 51.)
- Zoölogy 7d<sup>2</sup>. (See Zoölogy, p. 55.)

## MEDICAL SCIENCES

### Physiology

1. Professor CANNON, Asst. Professor MARTIN, and assistants. — Elementary Course. 4 Gr. Total 4.
20. Professor CANNON. — Research, Thesis, and Examination. 1 Gr. 1 Total.

### Biochemistry

1. Professor FOLIN and Asst. Professor HENDERSON. — General Biological Chemistry. 2 Gr. Total 2.
5. Professor FOLIN and Asst. Professor HENDERSON. — Advanced Biological Chemistry. 2 Gr. Total 2.
20. Professor FOLIN and Asst. Professor HENDERSON. — Research and Biological Chemistry. 2 Gr. Total 2.

### Pathology

- 1 <sup>1</sup>/<sub>4</sub>f. Professor COUNCILMAN and several assistants. — General Pathology. 2 Gr. Total 2.
- 2 <sup>1</sup>/<sub>4</sub>f. Professor COUNCILMAN and several assistants. — General and Special Pathology. 2 Gr. Total 2.

**Neuropathology**1 *hf.* Professor COUNCILMAN. — Elementary Course.

2 Gr. Total 2.

**Bacteriology**

1. Professor ERNST and several assistants. — Elementary Bacteriology.

1 Gr. Total 1.

20. Professor ERNST. — Research.

1 Gr. Total 1.

In accordance with the vote of the President and Fellows whereby the Faculty may under certain conditions authorize a Doctor of Philosophy or a Doctor of Science to give instruction gratuitously or for such fees as he may himself collect, Karl Schmidt, Ph.D., was authorized to give in the second half-year a course of lectures on "The Foundations of Mathematics."

On the recommendation of the Faculty Council of the Medical School, the President appointed a committee of the Faculty of Arts and Sciences to confer with a committee appointed by that Council and to "consider the correlation of courses in the Medical School with those of the University, especially as regards admission requirements to the Medical School." I give the exact words of the vote, though the use of the word "University" therein will not bear scrutiny.

The Faculty had a singularly uneventful year. Its most important act was the approval of a recommendation brought before it by the Dean of the Graduate School of Applied Science: —

That the Faculty recommend to the Corporation that certain Divisions and Departments in the Graduate School of Applied Science be organized as Schools: to wit: the School of Engineering, of Mining and Metallurgy, of Architecture and Landscape Architecture, of Forestry, of Applied Biology (Bussey Institution), — it being understood that additional schools of Applied Science may be hereafter organized.

That these Schools be grouped together as the Graduate Schools of Applied Science under a separate Faculty, to administer a self-contained graduate programme.

That this organization go into effect at the beginning of the next academic year.

The approval of the Faculty, though it may have been little more than formal, is regarded by some persons as a prophecy that the Faculty of Arts and Sciences will not long continue. This Faculty is a young body. It came into existence in 1890, when the growth of the Graduate Departments and the Lawrence Scientific School and their relation to Harvard College made a new organization of the government desirable and when the old

College Faculty had plainly become too large for the efficient handling of detailed College business. The College, the Scientific School, and the Graduate School were thenceforth to be governed by separate boards, each board with the appropriate Dean for its chairman. These boards, though appointed by the Corporation, were practically executive committees of the Faculty. Through their Deans they reported to the Faculty their most important doings and referred to the Faculty their most important questions,—in particular, questions which concerned more than one of the three schools. The Faculty thus comprising all the more stable teachers of candidates for degrees in arts or in sciences became known as the Faculty of Arts and Sciences.

This body has grown larger and larger, and has sent out as new offshoots the Graduate Schools of Applied Science and the Graduate School of Business Administration, each with its own Dean. The Committee on the Summer School also has been newly organized in connection with the work of University Extension and the degree of A.A. It now has its own Dean and is much like the other administrative boards. As the Faculty grows larger, and as more and more of its business passes into the hands of boards, it has fewer matters to discuss, and is more unwieldy in discussing them. It is obliged to rely on committees for nearly everything not managed by the administrative boards: but these committees, like the boards, are strictly accountable to the Faculty; their policy may at any time become a matter for Faculty discussion. The Faculty still serves as an admirable meeting-ground for the great body of University teachers not teaching exclusively in the professional schools. It holds its members together better than many members are aware and gives every man a glimpse of the character and the purposes of his fellow workers. Also, in a place as busy as Cambridge, the few minutes of social intercourse among men who ordinarily see little of their colleagues mean much. Best of all, the knowledge that a new and important measure must run the gauntlet of Faculty criticism and the risk of Faculty condemnation is a check to ill-considered and radical action. Responsibility to the Faculty, though often irksome, is a good thing for every member of it.

On the other hand, the Graduate Schools of Applied Science and the Graduate School of Business Administration, which is likely to ask for similar independence, are, to all intents and purposes, professional schools, eager to work in the same professional spirit that characterizes the schools of Law, Medicine,



and Divinity. As professional schools they seek development unhampered by the Faculty, and responsibility to the President and Fellows only. Many of the teachers still offering courses under the Faculty of Arts and Sciences remain members of that body.

Discussion of the new method of admission to Harvard College I shall leave for the most part to Dean Hurlbut. A year's experience with this method strengthens my belief that the action of the Faculty in establishing it was one of the most important and most sensible acts ever committed by that body. Thus far the method has thoroughly justified itself. Sure to be regarded by the hostile or the sceptical as a lowering of the standard of admission, it has shown itself what it was meant to be, a peculiarly good method for the better students. These better students it relieves of needless strain, while it applies a test so searching that anyone who meets this test may confidently attack College work. For the boy who is coached into College rather than fitted for it, the old method remains the only hope.

The new method depends wholly on the steady intelligence of the committee which administers it. Granted this steady intelligence, it is, in my opinion, the best scheme yet devised for admission to an American college.

L. B. R. BRIGGS, *Dean*.

## THE COLLEGE

TO THE PRESIDENT OF THE UNIVERSITY:—

SIR,—I have the honor of submitting to you a report on Harvard College for the academic year 1911-12.

The number of students in the College at the time the lists were compiled for the Catalogue of 1911-12 was two thousand two hundred and sixty-two, divided as follows:—

Seniors . . . . .	372
Juniors . . . . .	537
Sophomores . . . . .	499
Freshmen . . . . .	739
Total number of Undergraduates . . . . .	2,147
Special Students . . . . .	43
Unclassified Students . . . . .	72
Total . . . . .	2,262

Compared with the figures at the corresponding time of the preceding year these show a gain of forty-five:—

	Gain	Loss
Seniors . . . . .		10
Juniors . . . . .	55	
Sophomores . . . . .		17
Freshmen . . . . .	68	
Special Students . . . . .		32
Unclassified Students . . . . .		19
	<u>123</u>	<u>78</u>
Net gain . . . . .	45	

As for a number of years past, therefore, I have again to report that in numbers the College remains practically stationary.

During the year the following students died:—

Edward Little Rogers, '13, . . . . November 23, 1911.  
 Joseph Brown Emerson, Unclassified, December 20, 1911.  
 Merle DeWitt Britten, '15, . . . . . July 4, 1912.

Four hundred and nineteen candidates—nineteen in February and four hundred in June—received the degree of Bachelor of Arts in course. Of these two hundred and eighty-seven were registered as Seniors. The registration of the others is shown in the following table:—

On leave of absence all the year . . . . .	22
On leave of absence first half-year . . . . .	5
On leave of absence second half-year . . . . .	20
Graduate Students in Arts and Sciences . . . . .	9
Graduate Students in Applied Science . . . . .	7
Registered in the Law School . . . . .	15
Registered in the Medical School . . . . .	4
Registered in the Business School . . . . .	4
Registered in the Junior Class . . . . .	14
Registered in the Freshman Class . . . . .	1
Registered as a Special Student . . . . .	1
	<u>102</u>
To be designated "as of 1912" in the <i>Quinquennial</i> . . .	30
	<u>132</u>

Fifty-two candidates received the degree of Bachelor of Science. Their registration is indicated in the next table: —

Senior Class . . . . .	42
Junior Class . . . . .	1
	<u>43</u>
In Graduate School of Applied Science . . . . .	2
In the Medical School . . . . .	1
	<u>46</u>
On leave of absence first half-year . . . . .	1
On leave of absence second half-year . . . . .	4
	<u>51</u>
To be designated "as of 1913" in the <i>Quinquennial</i> . . .	1
	<u>52</u>

The last two tables show an increase, over the preceding year, of five candidates for the degree of Bachelor of Arts and of eleven for that of Bachelor of Science.

The next two tables show the losses and gains in the three lower classes between November, 1911, and the latter part of October, 1912.

	November, 1911	Loss	Gain	November, 1912
Class of 1918 . . (Juniors)	537	211	71	(Seniors) 397
Class of 1914 . . (Sophomores)	499	131	114	(Juniors) 482
Class of 1915 . . (Freshmen)	739	173	93	(Sophomores) 659
		<u>515</u>	<u>278</u>	

Net loss in the three classes between Nov., 1911, and Nov., 1912, 237

	Class of 1913	Class of 1914	Class of 1915	Total for three classes
<b>LOSSES</b>				
Left College before the end of the year . .	14	16	40	70
Left College at the end of the year . . . .	148	24	23	195
Were "dropped" and left College . . . .	8	17	23	47
Entered a lower class . . . . .	21	50	43	114
Entered a higher class . . . . .	20	24	45	89
<b>Total loss . . . . .</b>	<b>211</b>	<b>131</b>	<b>173</b>	<b>515</b>
<b>GAINS</b>				
From higher classes . . . . .	4	21	50	75
From lower classes . . . . .	34	36	..	70
Newly admitted . . . . .	38	57	43	138
<b>Total gain . . . . .</b>	<b>71</b>	<b>114</b>	<b>93</b>	<b>278</b>
<b>Net loss . . . . .</b>	<b>140</b>	<b>17</b>	<b>80</b>	<b>237</b>
<b>Net gain . . . . .</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>

The next table shows the losses and gains in the number of Special Students since December, 1911:—

*In attendance, December, 1911 . . . . .	48
Left College before the end of the year . . . . .	4
Left College at the end of the year . . . . .	21
Entered a College class . . . . .	4
<b>Total loss . . . . .</b>	<b>29</b>
Reentered College in 1912 as Special Students . . .	14
Newly admitted . . . . .	14
<b>Total . . . . .</b>	<b>28</b>
<b>Net loss . . . . .</b>	<b>15</b>

The Freshman Class in 1912-13 numbers 661. The total for this year cannot justly be compared with the total, 740, of the preceding year, because of the adoption of the new rule whereby students with admission conditions are no longer held in the Freshman Class, but go on with their original class, being put on probation if before the beginning of their third year they have not removed their conditions. The number admitted by examination in 1911 was 593, 21 more than by examination in 1912. Twenty-five students admitted by examination before 1911 entered with the Class of 1915; 26 admitted by examination before 1912 entered with the Class of 1916.

\* Catalogue figures, 1911-12.

## THE FRESHMAN CLASS OF 1912-13

Admitted by examination in 1912 . . . . .	572
Admitted by examination before 1912 . . . . .	26
Admitted from another college . . . . .	12
*Admitted from a higher class . . . . .	51
Admitted from the Special Students . . . . .	00
Total . . . . .	<u>661</u>

The members of the Administrative Board for 1911-12 were Professors Willson, Parker, Ward, Messrs. Wells, Hunt, the Assistant Dean (for the first half-year Mr. Castle, for the second Assistant Professor Yeomans), and the Dean. During the year one hundred and ten students were placed on probation for low records, of whom thirty-three were "dropped Freshmen"; eleven were put on probation for disciplinary reasons; the probation of ten students was closed (six of the ten were "dropped Freshmen"); six students were required to withdraw for various disciplinary reasons.

At the end of the year 1911-12 the Administrative Board, having three years before given notice to the Faculty and informally to the undergraduates that it should do so, abandoned the practice, which had existed for many years, of forgiving to a student who had been in residence for the full four undergraduate years two points of admission condition, provided that these were all that stood between him and his degree, and provided further that they were not in elementary German or elementary French. In practice these had as a general thing come to be in either elementary Algebra, Plane Geometry, or Science. That there was for this practice no excuse except the good nature of the Faculty was demonstrated by the fact that at Commencement, 1912, only three candidates lost their degrees on account of their failure to remove admission conditions. Either the mathematical lion that had stood in the way and paralyzed travellers had lost his teeth, or the travellers had sharpened their swords. The forgiving of two points of condition, provided they are neither in French nor in German, is now accorded to a student only in case by high scholarship, the demonstration of real ability in college work, he wins a position in either the First or the Second Group of Scholars.

* Dropped from 1915 on account of low record . . . . .	43
Readmitted as Freshmen, but were out of college last year, or withdrew during the college year:—	
Formerly in 1914 . . . . .	3
Formerly in 1915 . . . . .	5
Total . . . . .	<u>51</u>

An important change in the rules, logical and beneficial, will still further stimulate undergraduates early to remove their admission conditions. For many years there obtained a rule that a student might not register in a class higher than the Sophomore until he had removed his admission conditions. The Sophomore Class was, therefore, swollen, always the largest, for a student who had reduced his conditions to not more than two points, feeling sure that these would be forgiven at the time he came up for his degree, and for all purposes of undergraduate life being regarded by his fellows as a member of his original class, confidently lay back and awaited the last meeting of the Faculty before Commencement. Only a prying few, to whom the matter could be easily explained, looked into the long list of names in the Catalogue, expressed surprise or asked embarrassing questions; and carrying about a study card of a color different from that of the cards of his original classmates brought a pang for but a single day at the opening of the year, the less sharp because the colors of the cards of the three upper classes might vary from year to year; and even if they did not they were not conspicuous, not the dearest color. Only a Freshman had always a crimson card.

In 1907 the Faculty amended this rule, and refused to allow a student to register in a class higher than the Freshman until his conditions were out of the way. This change reduced somewhat the number of conditioned men. A red card brought a keener pang, and there was likely to be more interest in the list of Freshmen as printed in the Catalogue than in the lists of the other classes. This change, however, produced an evil that far outweighed all the good it wrought. An erroneous impression concerning the number of the incoming Freshman Class, the only class in the numbers of which the public and the newspapers are interested, was spread broadcast through the country, involving each year elaborate explanations which, after all was said, never made the matter entirely clear.

By the plan now adopted a student will be given until the beginning of his third year in which to remove his admission conditions either by admission examinations or by "additional work" in College. (He can, also, by high standing win the forgiveness of two points.) If, however, by the beginning of his third year he has not cleared his record he is placed on probation, a logical and proper action for the Faculty to take, since it may well be debated whether a student who has not after two years

made up his admission deficiencies had not better be in some other employment. Certainly he ought to be required to give all of his attention to his studies: he should not be allowed either to represent the University publicly or to take part in public performances. Under the new rule, after a student has spent two years in College, his privilege of removing an admission condition by passing an admission examination is withdrawn; he must remove it by passing in a regular college course elected in addition to the amount of work regularly prescribed for him. The Faculty may well consider whether the limitation of this privilege to two years is wise: whether it would not be better to permit a student to remove a condition by an admission examination at any time when admission examinations are held. Difficulties with the new rule will surely arise when members of the classes to which it applies, between whom and whose degrees after the classes have graduated, stand only admission conditions, seek to complete the requirements for their degrees. To require these men, who have done in the College the work necessary for their degrees, to return to College to take additional work simply to remove admission conditions, will involve a hardship that may very well be called unjust. That the new rule is effective is shown by the fact that of the students admitted in 1910, the first to whom the new law has been applied, only twelve, present or past members of the Class of 1914, have been placed on probation for failure to remove their admission conditions. This new rule is in line with the tendency of the Board to use but two forms of censure, — probation and some form of complete severance of a student's connection with the College, either permanently or for a specific time. The practice is wise and salutary. Probation means in the language of the rule "serious danger of separation from College," doubt as to the wisdom of a student's remaining longer a member thereof, unless he can prove by his conduct or his work in College, or both, that he deserves to remain. To have a youth long on probation, unless a long time is specified when probation is imposed, or repeatedly to incur the censure of probation, something that not infrequently occurs, is bad for him and for the College. If he does not soon win restoration to good standing and hold it, his connection with the College should be severed, either finally or until such time as experience at work in the world with men has shown him what a college can really give him, and he stands ready to give his word that if he is allowed to resume his studies he will work as a man should.

Forty-eight students won a place in the First Group of Scholars: of these thirteen, including the holder of the Jacob Wendell Scholarship (given to the student most distinguished in the work of the Freshman year, irrespective of his financial need) received honorary scholarships; thirty-five, scholarships with stipend. On the work of the year 1910-11, winning scholarships for the year 1911-12, fifty-three students won positions in the First Group: sixteen honorary scholarships, thirty-seven scholarships with stipend. One hundred and fifty-three won places in the Second Group of scholars: sixty-nine, honorary scholarships; eighty-four, scholarships with stipend. The preceding year one hundred and thirty-one won a position in this group: fifty-five holding honorary scholarships; seventy-six, scholarships with stipend. The First Group for the year 1912-13 is made up of twenty members of the Class of 1913, sixteen of the Class of 1914, twelve of the Class of 1915; the Second Group, of sixty-six members of 1913, thirty-four of 1914, and fifty-three of 1915. Compared by classes 1913 wins in the two groups eighty-six places; 1914, fifty; 1915, sixty-five. The total number of scholars in the two groups is two hundred and one, about ten per cent, roughly speaking, of the number of students in College eligible to compete for scholarships at the end of the year.

In his annual report on the work of the Faculty of Arts and Sciences for the year 1910-11 the Dean of the Faculty discussed "the most important act of the Faculty in the whole academic year — and its most important act in many years," the framing and the adoption of a "new plan" for admission to Harvard College. Men sceptical as to the wisdom of the plan could be found in our own Faculty; and in the faculties of other institutions were scornful sceptics who were sure that Harvard had "surrendered" to "the certificate system," — that under the new plan examinations were to be but formal, nominal. Those who used this argument showed merely that they knew little of the temper of the Harvard Faculty or of its committees. True, any system of examinations may become a mere form, and the new plan admits of this more easily than does the old; but to argue that at Harvard it is likely soon to become so is impossible for anyone who knows the Faculty as at present constituted. In accepting in place of the Harvard examinations the examinations of the College Entrance Examination Board, the Faculty did much to make Harvard more accessible to youths in remote parts of the country: first, because there is now practically no



place in the United States or Western Europe which is not within fairly easy reach of some one of the Board's examination centres; and, second, because a candidate stands a better chance of passing the requisite examinations, since the adoption of the Board's definitions of subjects has done much to secure uniformity in teaching. Uniformity of requirements, even if only on paper, helps the work of the schools. Certainly conditions were greatly improved over those of thirty years ago, when to be able even to hope to secure admission a lad must have made his decision to enter years before he presented himself for examination. But with all the improvements a youth of promise might still find his "way to Harvard College blocked by an eccentricity of requirement"; there still existed "characteristic differences"; a certain number of points had to be secured. The difference between the emphasis of the old plan and that of the new is fundamental: it is no longer laid on points; it is on training, development, maturity of mind, — complete, not partial work. Has the candidate received a good secondary school education? Has his preliminary training fitted him successfully to carry on College work? If after the Committee on Admission is satisfied that a candidate has completed an approved school course, he can, by passing examinations in certain fundamental subjects and in a subject in which he has shown special aptitude, demonstrate this, he is admitted to College, unhampered by conditions, requirements that he must make up certain uncompleted tag ends of preliminary education. Theoretically the plan is ideal.

That the action of the Faculty was one of the most important in many years and also wise, the experience of a single year gives proof full of bright promise, almost convincing. That the change was welcome is shown by the fact that although the plan was not adopted until January 17, 1911, when, however, very wide notice of its adoption was given, no less than 185 candidates applied for permission to be examined under it. To 139 of these permission was given. Of the 139 examined 83 were admitted; 56 were rejected. Of the 83 admitted 79 entered College, 66 from public schools, 13 from private, representing, by residence of candidates, 20 states, the District of Columbia, and one foreign country; by schools, nineteen states and the District of Columbia. Among the schools three in New York State, one each in Maine, New Jersey, Pennsylvania, Alabama, Georgia, Illinois, Missouri and Nebraska had never before sent boys directly to Harvard College.

The distribution of the candidates by residence and by location of schools is shown in the following tables:—

**MEN WHO ACTUALLY ENTERED HARVARD IN 1911 UNDER  
NEW PLAN**

GEOGRAPHICALLY ARRANGED BY RESIDENCE		GEOGRAPHICALLY ARRANGED BY SCHOOLS	
Maine . . . . .	2	Maine . . . . .	2
Vermont . . . . .	1	Vermont . . . . .	1
Massachusetts . . . . .	81	Massachusetts . . . . .	83
New York . . . . .	18	Connecticut . . . . .	3
New Jersey . . . . .	5	New York . . . . .	12
Pennsylvania . . . . .	4	New Jersey . . . . .	5
	—	Pennsylvania . . . . .	4
Total, North Atlantic Division .	56		—
		Total, North Atlantic Division .	60
District of Columbia . . . . .	2	District of Columbia . . . . .	3
Virginia . . . . .	1	Georgia . . . . .	1
Georgia . . . . .	1		—
Total, South Atlantic Division .	4	Total, South Atlantic Division .	4
Colorado . . . . .	2	Colorado . . . . .	1
Washington . . . . .	2	Washington . . . . .	2
	—		—
Total, Western Division . . . .	4	Total, Western Division . . . .	3
Ohio . . . . .	3	Ohio . . . . .	3
Illinois . . . . .	3	Illinois . . . . .	2
Michigan . . . . .	1	Michigan . . . . .	1
Wisconsin . . . . .	1	Wisconsin . . . . .	1
Minnesota . . . . .	1	Minnesota . . . . .	0
Missouri . . . . .	1	Missouri . . . . .	2
Nebraska . . . . .	1	Nebraska . . . . .	1
Kansas . . . . .	1		—
Total, North Central Division .	12	Total, North Central Division .	10
Kentucky . . . . .	1	Kentucky . . . . .	1
Alabama . . . . .	1	Alabama . . . . .	1
	—		—
Total, South Central Division .	2	Total, South Central Division .	2
		Total . . . . .	79
Mexico . . . . .	1		
Total, Foreign . . . . .	1		
	—		
Total . . . . .	79		

Schools added to School and College List by men who actually entered Harvard in 1911 by the New Plan:—

MAINE . . . . .	Skowhegan High.
NEW YORK . . . . .	Fulton High.
NEW YORK . . . . .	Hudson Falls High.
NEW YORK . . . . .	Rochester, West High.
NEW JERSEY . . . . .	Hammonton High.
PENNSYLVANIA . . . . .	Bradford High.
ALABAMA . . . . .	Marion Institute, Marion.
GEORGIA . . . . .	Academy of Richmond County.
ILLINOIS . . . . .	La Grange, Lyons Township High.
MISSOURI . . . . .	Cape Girardeau Normal School.
NEBRASKA . . . . .	Harvard High.

What has been the year's work of these men? The 79 elected, or rather carried until such time as some record could be secured in them, 408 courses. In these they secured the following grades: 61 A's; 147 B's; 155 C's; 34.5 D's; 6.5 E's; total, 404; from each of three courses a student was excluded; one student was absent from a final examination and therefore received no grade; total, 408. It will be seen that the number of grades of distinction, A and B, outnumbers all others. Of the 6.5 grades of failure, E, three were in the case of a single student, who was also excluded from a fourth course. The other 3.5 were divided among four students. Each of two other students was excluded from a single course, and one student of high record, mistaking the date of a final examination, was absent from the examination and thus lost credit for the course. All but thirteen had distinction in at least a half-course; and of these 64 all but two had distinction in more than this amount. The 34.5 grades of D were divided among 26 students. In the matter of freedom from official discipline the record is distinguished. One student was placed on probation during the course of the year, at the end of the year had his probation closed, and did not seek readmission. One other, failing at the end of the year to attain a grade above D, had his connection with the College severed, but on evidence of good work done during the summer was readmitted at the beginning of the present year to the Freshman Class. During the year a third student of this group was "admonished," — the mildest form of College censure, and in this case for a very minor offence in committing which he had much official sympathy. Four of the twelve members of the Class of 1915 winning positions in the First Group of Scholars in Harvard College, 33%, and eleven of the fifty-three winning positions in the Second Group, 20.7%, are numbered among

these 79, fifteen out of the class total of sixty-five scholars. Of these sixty-five winners of scholarships five were admitted to College before 1911; sixty scholarships, therefore, were won by the 593 students admitted by examination in 1911, seventy-nine of whom entered by the new plan. In other words, 13.3% of the students admitted by examination in 1911 won 25% of the scholarships awarded to the class on the ground of academic distinction.

Brilliant as is this record, and surely it may be called brilliant, a prediction that the records of future years will be as brilliant cannot safely be made. Sixty-six of these boys came from public schools, picked youths; thirteen from private, — these also, for this year, picked. A just estimate can be made only when a larger number of private schools, the schools whose business it is to get into College not only every boy who wishes to go to College, but every boy whose parents wish him to go, and which "know how to prepare a boy to pass entrance examinations," make, if ever they do, liberal use of the new plan. That it can ever wholly supersede the old method appears, in view of its nature and the papers thus far set, extremely unlikely; it is not adapted to that type of boy (and a great many of them are well worth a college education) who, in the words of the headmaster of a once famous school, "whenever he gets a nugget should be allowed to run right up to the College and deposit it." But the hope of the Chairman of the Committee on Admission that by a modification of this new system for use in September, and the employment of the examinations of the College Board wholly in place of our own old system in June, we may be rid of the task of setting examination papers on the old system, seems very possible of realization.

The points on the other side, however, urged by Professor Edwin H. Hall, demand closest attention: the duty of watching with the utmost care the effect of the new plan upon secondary school education in general; the grave danger, when once candidates have the opportunity (which these had not) to shape their whole course for these examinations, that they will neglect so far as they dare those studies in which they know they shall not be examined; and the need of relief from the too great pressure of the colleges upon the schools, pressure of which the schools have long complained, and which any plan, no matter how good it be, framed only for the best students, does not afford.

Theoretically, as has already been said, the new plan is ideal, and the results of its first application are full of brilliant promise, amply justifying, so far as promise can, the labors and the hopes of the committee that drew it. The needs of the boys who are forced into college it does not, at least at present, appear to meet; but for that much more important class, those to whom college is a privilege, who love learning, in actual practice it far more nearly approaches the ideal than any other plan thus far devised. To schools that foster learning it should be an incentive and an inspiration.

B. S. HURLBUT, *Dean.*

## ATHLETIC SPORTS

TO THE PRESIDENT OF THE UNIVERSITY: —

SIR, — As Chairman of the Committee on the Regulation of Athletic Sports, I have the honor of reporting on Harvard athletics in 1911-12.

Besides the Chairman, the Committee contained, as Faculty members, Dean Hurlbut and Acting Secretary Wells; as graduate members, Dr. E. H. Nichols, Mr. R. F. Herrick, and Mr. G. R. Fearing, Jr.; as undergraduate members, Mr. H. de Windt, Mr. A. M. Goodale, and Mr. H. L. Gaddis. In the latter part of the year Mr. de Windt was succeeded by Mr. R. S. Potter.

To facilitate business and to avoid unnecessary meetings, the Committee voted: —

That Mr. Edgar Wells be appointed Vice-Chairman of this Committee and that the Chairman and Vice-Chairman, or either of them, be vested with all the authority of the Committee over the control of athletics in the following matters: —

1. In all matters appertaining to qualification for participation in athletic sports.

2. In all matters affecting intercollegiate contests, expressly including the schedules for games and other contests, and the time and place for them, and including all matters relating to admissions to games and other contests and to distribution of tickets therefor.

3. The control and management of all receipts and expenditures on account of athletics.

Obviously this vote gave the Chairman and the Vice-Chairman large powers and might be so interpreted as to do away with all other members of the Committee. It was not so interpreted, however. All matters of importance were referred to the Committee except in such emergencies as compelled the officers to act quickly.

In 1911-12 the best spent money was used in reclaiming six more acres of the Soldiers' Field. In general, money is well spent when it increases opportunity for exercise among all students, or relieves all students of subscriptions; it is spent less well — some think it is spent ill — in the preparation of comparatively few men for single great contests, in costly journeys to the scenes of those contests, in prolonged use of the training table, and in some

other things which college athletics as now conducted demand. On the other hand, without the great contests there would be less money to spend; and there is, I suppose, some question whether contests without elaborate preparation would be regarded as great. In this question something may be learned from the game between the Army and the Navy, which rivals in interest the game between Yale and Harvard: —

“At West Point,” says the *Yale News*, “where the daily practice lasts about forty-five minutes, Yale Football Teams have twice in succession been out-played, out-fought, and sent home — branded with defeat. A team of Army men, who find rest from strenuous labor in playing the game — who do not pretend to supremacy in it — have thus, more than Harvard and Princeton together, tarnished our football reputation.”

Since the opportunity for students to use the Harvard swimming tank in the Y. M. C. A. Building revived and justified the desire for a swimming team, the Committee voted to allow the formation of a University Swimming Team for the year 1912-13 under certain conditions.

It is worth noting that the champion tennis player of the University is the first scholar of his class.

In the major sports the teams had only moderate success. In rowing Harvard failed, as usual, to win from Cornell, and again won from Yale. In track athletics Harvard won the dual meets with Dartmouth and Yale, but made no remarkable score in the intercollegiate games. In football the speed and aggressiveness of Princeton proved too much for a Harvard team with several disabled players. Yale and Harvard played once more a tie game with no scoring. In baseball Harvard succumbed to both Princeton and Yale. When the size of Harvard University is considered and her enormous outlay on athletic sports, it would seem that she should win more of the great games; but since her University teams contain neither Freshmen nor members of any graduate or professional school, the number of men available for these teams is smaller than the public supposes. As to the enormous outlay on teams, I am not sure that it has increased the chance of victory, and I am sure that it has damaged some players. In certain things related to athletic games the College should spare no expense; for example, she should studiously and at any cost reduce the danger to life and limb. On the other hand, the College should not watch her athletes with that kind of care which leads them to think their nervous systems the most significant thing in life and luxurious living a matter of course. A boy poor when

he comes and poor when he goes gets a bad start in the struggle for a living if he has learned to regard limited trains, costly food, automobiles on the slightest provocation, and free entertainment in hours of leisure and refreshment as due from the world to him. In theory most persons favor economy; but in applying the theory to any one team, committees, coaches, managers, players, and captains have often been inclined — quite naturally — to consider everything before economy and to rely luxuriously on the great sums collected at games as more than covering the bills. What I have just said, though general, is by no means universal. Instances of courageous effort to keep expenses down are not infrequent among managers, and may at times be discerned even in captains and coaches. Moreover, there has been marked improvement in these matters within a very few years. The use of automobiles has been cut down; the waste in supplies has been diminished; and, in the present year, the cost per student at the football training table has been made altogether reasonable, with no signs of disaster to the team.

The dates of the boat-race and the baseball games have been disturbed by changes in the dates of Class Day and Commencement Day. In 1911, when Commencement was a week earlier at Yale than at Harvard, the Yale crew waited a week after everything at New Haven was over — a delay manifestly disadvantageous to Yale graduates, if not to the crew itself. In 1912, Commencement at Harvard was moved to the day following Commencement at Yale. Within a single week Class Day at Yale comes on Monday, Class Day at Harvard on Tuesday, Commencement at Yale on Wednesday, Commencement at Harvard on Thursday. The friends and graduates of Yale regarded a game of baseball at New Haven on Tuesday as almost essential to graduation week; the friends and graduates of Harvard regarded a game at Cambridge in close connection with Class Day, but not on that day, as almost essential to the festivities of the season. Neither college might fitly have the game in its own territory on its own Commencement Day. As a result the first game was played at New Haven on Tuesday, and the second at Cambridge on Wednesday, the Harvard Seniors in the team sacrificing their Class Day, the Yale Seniors their Commencement Day, and both teams undergoing two contests with no day between. This last consideration is not so important as members of a defeated team are disposed to think it. I question whether the strain of anticipation is not fully as great as the strain of



reality, and whether it is not just as well to play these two games without a longer interval. The need of two pitchers in a team that may have one or none is a more serious drawback. Except for the players the dates were unquestionably the best; and, compared with the total number of interested persons, the players are few.

The boat-race was rowed on Friday, the first day after Commencement at Harvard and the second day after Commencement at Yale. This date leaves Thursday an off day in the Yale festivities. Thus the proposal of Friday, coming from Yale, was not merely fair but generous, a courtesy which Harvard men should appreciate. The dates were settled without a suspicion of friction between the Colleges, and settled by men who did not question, outwardly or inwardly, each other's sincerity. This would seem, and should be, a matter of course; my excuse for mentioning it is its inexcusable novelty.

Last year several of the larger colleges made a distinct effort to prevent "yapping" on the baseball field, and achieved considerable success: but umpires still fail to enforce the rules which limit the remarks of players; and student players, who get their training directly and indirectly from professional players, are constantly tempted to do what they know to be done — and done without censure — by the heroes of the American and National Leagues. We like to believe that recent Harvard teams, though by no means perfect, have honestly tried to resist such temptations and to play a clean game.

L. B. R. BRIGGS.

## THE GRADUATE SCHOOL OF ARTS AND SCIENCES

TO THE PRESIDENT OF THE UNIVERSITY:—

SIR, — As Dean of the Graduate School of Arts and Sciences, I have the honor to submit a report on the School for the academic year 1911-12.

The following tables present in summary form information concerning the number and distribution of the students, recommendations for degrees, and the assignment of fellowships and scholarships.

Table I shows that the number of students registered in the School was four hundred and seventy-five, a decrease of nine from the preceding year. Of this number four hundred and forty-seven were resident, and twenty-eight non-resident, all of whom were travelling fellows. Of the resident students three hundred and ninety-four were in attendance during the whole year, of whom three hundred and eight were doing full work. Of the remaining fifty-three resident students thirty-one entered the School after November 1 and twenty-two withdrew before the end of the year.

TABLE I. — NUMBER AND CLASSIFICATION OF STUDENTS

	1909-10	1910-11	1911-12
I. Resident Students doing full work in the School for the whole academic year .....	279	311	308
Resident students not doing full work or not working for the whole year as Resident Students .....	156	147	139
	—435	—458	—447
Non-Resident Students holding fellowships .....	15	26	28
Non-Resident Students not holding fellowships .....	2	0	0
	— 17	— 26	— 28
II. Students whose studies lay chiefly in			
Semitic Languages and History .....	0	2	1
Ancient Languages (Classics and Indic Philology) .....	26	22	17
Modern Languages (including Comparative Literature) ....	117	164	137
History and Political Science .....	77	93	108
Philosophy .....	59	52	62
Education .....	23	16	20
Fine Arts .....	2	5	2
Music .....	3	4	6
Mathematics .....	30	22	20
Physics .....	14	15	13
Chemistry .....	26	34	31
Biology .....	29	30	30
Geology .....	9	12	7
Anthropology .....	9	5	4
Medical Sciences .....	5	3	11
Unclassed Students .....	23	5	6
	—452	—484	—475
III. First-year Students .....	254	257	256
Second-year Students .....	110	136	109
Third-Year Students .....	53	53	65
Fourth-year Students .....	24	24	33
Students in fifth year or later .....	11	14	12
	—452	—484	—475
IV.*A.B.'s and S.B.'s of Harvard University and of no other institution	132	160	128
A.B.'s and S.B.'s (and holders of similar degrees) of other institutions and also of Harvard University .....	6	9	5
Students not holding the Harvard degree of A.B. or S.B. ....	314	315	342
	—452	—484	—475
V. Students holding the Harvard degree of A.M., S.M., Ph.D., or S.D. ....	106	120	133
*Students holding the Harvard degree of A.B. or S.B., but not of A.M., S.M., Ph.D., or S.D. ....	96	121	90
Students holding no Harvard degree in Arts, Philosophy, or Science .....	250	243	252
	—452	—484	—475

In Table II similar facts concerning residence and amount of work are set forth for a period of twenty years. Table III shows the percentage of students in their first and following years.

\* Harvard College Seniors on leave of absence, with work for the bachelor's degree completed or nearly completed, are counted in this Table as holders of the degrees for which they are candidates in Harvard College.

TABLE II. — NUMBER OF STUDENTS: 1892-1912

	1892-93.	1893-94.	1894-95.	1895-96.	1896-97.	1897-98.	1898-99.	1899-1900.	1900-01.	1901-02.	1902-03.	1903-04.	1904-05.	1905-06.	1906-07.	1907-08.	1908-09.	1909-10.	1910-11.	1911-1912.
Resident Students doing full work in the School for the whole academic year .....	127	162	161	175	194	171	218	227	228	218	216	289	273	260	281	287	290	279	311	308
Resident Students not doing full work or not working for the whole year as Resident Students .....	73	86	94	105	96	107	103	96	113	86	94	123	105	133	105	119	123	156	147	139
Whole number of Resident Students .....	200	248	255	280	290	278	321	326	339	304	310	412	378	393	386	406	413	435	458	447
Non-resident Fellows .....	9	10	12	13	14	15	12	13	14	11	15	14	15	16	21	17	15	15	26	28
Other Non-Resident Students .....	7	1	5	6	2	....	3	2	....	....	....	1	2	....	....	1	1	2	....	....
Whole number of Non-Resident Students .....	16	11	17	19	16	15	15	15	14	11	15	15	17	16	21	18	16	17	26	28
Whole number of students .....	216	259	272	299	306	293	336	341	353	315	325	427	395	409	407	424	429	452	484	475
Percentage of Resident Students doing full work for whole academic year .....	64	65	63	63	67	62	68	70	67	72	70	70	72	66	73	71	70	64	68	69

TABLE III. — PERCENTAGE OF STUDENTS IN THEIR FIRST AND FOLLOWING YEARS: 1899-1912

	1899-1900.	1900-01.	1901-02.	1902-03.	1903-04.	1904-05.	1905-06.	1906-07.	1907-08.	1908-09.	1909-10.	1910-11.	1911-12.
First-year Students .....	% 53	% 54	% 50	% 54	% 61	% 60	% 53	% 56	% 57	% 57	% 56	% 53	% 54
Second-year Students .....	25	23	26	26	21	24	26	21	23	24	25	28	23
Third-year Students .....	11	15	12	11	12	11	13	14	12	12	11	11	14
Fourth-year Students and Students of longer residence .....	11	8	12	9	6	5	8	9	8	7	8	8	9

Table IV shows a marked decline in the past year in the percentage of graduates of Harvard College studying in the Graduate School of Arts and Sciences. It is true that the proportion of Harvard men in 1910-11 was unusually large, but the percentage in 1911-12 is less than in any previous year, and may well indicate a tendency which should be watched in all departments of the University. Nevertheless, the quality of those who enter the Graduate School of Arts and Sciences shows no decline. It still remains true, as shown statistically in my report for 1909-10 and in the report prepared by Mr. Robinson in 1907-08, that the great majority of the honor men who continue their studies at Harvard enter the Graduate School of Arts and Sciences, and that this tendency increases with the grade of distinction achieved. Thus during the last five years, out of one hundred and seventeen who received the A.B. or S.B. *magna cum laude* fifty-three returned to the University the following year and thirty-five entered the Graduate School of Arts and Sciences; while of twenty-one graduating *summa cum laude* sixteen returned, all except three entering the Graduate School of Arts and Sciences. While it thus appears that in this respect the Graduate School of Arts and Sciences more than holds its own in comparison with the other graduate departments of the University, it is still true that the total number of Harvard men of promise who go on for advanced study in the humanities and pure science is less than it should be. Doubtless in America generally the career of a teacher and scholar does not offer the attractions it should offer to men of ability and ambition, but the colleges have also their responsibility, and we may well ask ourselves whether Harvard College is doing all that it might to develop the love of learning among its students.

TABLE IV. — PERCENTAGE OF GRADUATES OF HARVARD  
COLLEGE: 1907-08 — 1911-12

	1907-08.	1908-09.	1909-10.	1910-11.	1911-12.
Total enrolment .....	424	429	452	484	475
*Number of graduates of Harvard College .	124	131	132	160	128
*Percentage of graduates of Harvard College .....	29%	30%	29%	37%	26%
Number of graduates of other colleges and universities .....	300	298	320	324	347
Percentage of graduates of other colleges and universities .....	71%	70%	71%	63%	74%

Tables V, VI, and VII indicate that the School continues to maintain its national character in the geographical distribution of its students and of the institutions from which they come to Harvard.

\* Harvard College Seniors on leave of absence are reckoned as graduates of Harvard College.

TABLE V.—COLLEGES AND UNIVERSITIES REPRESENTED BY FOUR OR MORE GRADUATES IN THE SCHOOL:  
1907-08, 1908-09, 1909-10, 1910-11, 1911-12

1907-08.	1908-09.	1909-10.	1910-11.	1911-12.
Harvard ..... 183 Amherst ..... 10 Michigan ..... 9 Brown ..... 8 Dartmouth ..... 8 Rochester ..... 8 Williams ..... 7 Bowdoin ..... 6 Brown ..... 6 California ..... 6 Texas ..... 6 Yale ..... 5 Columbia ..... 5 Indiana ..... 5 Ohio Wesleyan ..... 4 Chicago Washington ..... 4 George Washington ..... 4 Mass. Inst. of Tech. .... 4 Lebanon ..... 4 Mt. Allison ..... 4 Princeton ..... 4 Toronto ..... 4 Vanderbilt ..... 4 Washington ..... 4	Harvard ..... 183 Columbia ..... 11 Amherst ..... 9 Brown ..... 9 Dartmouth ..... 9 Bowdoin ..... 8 Michigan ..... 7 Princeton ..... 7 Harvard ..... 7 Mass. Inst. of Tech. .... 6 Northwestern ..... 6 Williams ..... 6 Boston University ..... 6 Chicago ..... 5 Missouri ..... 5 Mt. Allison ..... 5 Texas ..... 5 Toronto ..... 5 West Virginia ..... 5 Yale ..... 5 Allegheny ..... 4 California ..... 4 Oberlin ..... 4 Ohio Northern ..... 4 Ohio State ..... 4 Southern California ..... 4 Tufts ..... 4 Wesleyan (Conn.) ..... 4	Harvard ..... 199 Amherst ..... 14 Dartmouth ..... 10 Chicago ..... 8 Harvard ..... 8 Princeton ..... 8 Williams ..... 8 Bowdoin ..... 7 Kansas ..... 7 Harvard ..... 7 Missouri ..... 7 Syracuse ..... 7 Yale ..... 7 Indiana ..... 7 Brown ..... 6 Mass. Inst. of Tech. .... 6 Michigan ..... 6 Northwestern ..... 6 Texas ..... 6 California ..... 5 Columbia ..... 5 Ohio State ..... 5 Tufts ..... 5 Charleston ..... 4 Mt. Allison ..... 4 Georgia ..... 4 Oberlin ..... 4 Ohio Northern ..... 4 Ohio State ..... 4 Southern California ..... 4 Western Reserve ..... 4	Harvard ..... 218 Dartmouth ..... 11 Bowdoin ..... 9 Amherst ..... 8 Harvard ..... 8 Chicago ..... 8 Northwestern (Ill.) ..... 8 Boston Univ. .... 7 Brown ..... 7 Yale ..... 7 Indiana ..... 6 Syracuse ..... 6 North Carolina ..... 6 Toronto ..... 6 Missouri ..... 6 Willard (Ky.) ..... 5 Central (Ky.) ..... 5 Columbia ..... 5 Cornell ..... 5 Winnomouth ..... 5 Wisconsin ..... 5 Mt. Allison ..... 5 Mass. Inst. of Tech. .... 5 Tufts ..... 5 Kansas ..... 4 Allegheny ..... 4 Dalhousie ..... 4 Leland Stanford Jr. .... 4 Ohio State ..... 4 Ohio Wesleyan ..... 4 Trinity (Conn.) ..... 4 California ..... 4 McGill ..... 4	Harvard ..... 211 Yale ..... 16 Dartmouth ..... 13 Bowdoin ..... 10 Boston Univ. .... 8 Haverford ..... 8 Indiana ..... 8 Kansas ..... 7 Michigan ..... 7 Toronto ..... 7 Williams ..... 7 California ..... 6 McGill ..... 6 Missouri ..... 6 North Carolina ..... 6 Northwestern (Ill.) ..... 6 Wisconsin ..... 6 Amherst ..... 5 Brown ..... 5 Chicago ..... 5 Ohio State ..... 5 Ohio Wesleyan ..... 5 Cady ..... 4 Columbia ..... 4 Dalhousie ..... 4 DePaul ..... 4 Mass. Inst. of Tech. .... 4 Monmouth ..... 4 Syracuse ..... 4 Virginia ..... 4 Wesleyan (Conn.) ..... 4
Total Membership, 494	439	453	484	476

TABLE VI. — HOLDERS OF DEGREES FROM HARVARD  
AND TWENTY-FIVE OTHER COLLEGES AND UNIVERSITIES  
1896-97 — 1911-12

	1896-97.	1897-98.	1898-99.	1899-1900.	1900-01.	1901-02.	1902-03.	1903-04.	1904-05.	1905-06.	1906-07.	1907-08.	1908-09.	1909-10.	1910-11.	1911-12.	Total
Harvard .....	174	178	196	191	197	189	174	232	192	197	185	182	182	199	218	211	3097
Amherst .....	7	5	5	7	10	8	10	14	8	8	7	10	9	14	8	5	185
Brown .....	5	7	8	5	11	8	11	12	7	12	4	8	9	6	7	5	125
Dartmouth .....	6	6	2	3	6	5	7	12	9	6	10	8	9	10	11	13	123
Bowdoin .....	4	3	6	4	9	8	7	7	5	3	5	6	8	7	9	10	111
Yale .....	2	4	10	4	7	4	6	9	7	8	7	6	5	7	7	16	109
Michigan .....	4	3	4	7	7	2	7	10	5	10	6	9	7	6	3	7	97
California .....	7	6	8	8	7	7	6	4	3	3	5	6	4	5	4	6	89
Haverford .....	2	3	5	5	4	4	5	7	5	5	5	3	6	8	8	8	83
Ohio Wesleyan .....	1	4	2	2	3	5	5	8	14	12	4	5	3	4	4	5	81
Williams .....	2	—	2	4	6	3	4	7	7	7	3	7	6	8	6	7	79
Toronto .....	1	5	6	5	6	6	3	4	5	3	8	4	5	2	6	7	76
Kansas .....	8	8	5	4	5	2	3	3	2	3	5	3	4	7	5	7	74
Boston Univ. ....	1	2	3	4	6	1	1	5	5	7	8	6	5	3	7	8	72
Indiana .....	6	4	5	4	2	3	3	2	3	4	5	5	3	6	6	8	69
Northwestern .....	2	5	6	6	5	1	6	2	2	1	1	2	6	6	8	6	65
Chicago .....	1	3	2	2	3	3	7	1	3	4	4	4	5	8	5	5	63
Tufts .....	5	2	6	5	5	4	6	6	3	1	2	—	4	5	5	2	61
Columbia .....	2	3	1	—	1	1	6	5	1	4	7	5	11	5	5	4	61
Leland Stanford Jr. .	4	4	7	6	2	3	6	4	5	3	3	4	1	1	4	3	60
Oberlin .....	7	5	3	6	9	4	1	—	1	3	3	3	4	4	—	2	55
Princeton .....	3	5	1	2	3	4	3	2	—	3	4	4	7	8	3	3	55
Texas .....	2	2	1	3	3	3	5	5	3	1	2	5	5	6	3	2	53
Dalhousie .....	2	2	3	4	4	5	2	2	2	4	2	6	3	3	4	4	49
Mass. Inst. of Tech. .	3	4	3	3	2	1	1	1	1	2	2	4	6	6	5	4	48
Total Membership ...	306	293	336	341	353	315	325	427	393	409	407	424	429	452	484	475	

TABLE VII. — BIRTHPLACES OF GRADUATE STUDENTS: 1909-12

	1909-10	1910-11	1911-12
Students born in the New England States .....	132	148	135
Students born in other Northern States east of the Mississippi River .....	160	158	164
Students born in Southern States east of the Mississippi River .....	37	42	43
Students born in States west of the Mississippi River .....	61	65	66
Students born in the Dominion of Canada .....	27	32	26
Students born in other foreign countries .....	35	39	41
Total number of students .....	452	484	475
Percentage of students born in New England .....	29	30	28
Percentage of students born elsewhere .....	71	70	72

Tables VIII and IX set forth the number of candidates recommended for higher degrees and their distribution throughout the various Divisions and Departments.

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TABLE VIII.—RECOMMENDATIONS FOR DEGREES IN 1910-12

	1910	1911	1912
I. Graduate students recommended for A.M. . . . .	130	150	124
Graduate students recommended for S.M. . . . .	4	—	—
Graduate students recommended for Ph.D. . . . .	34	40	36
	—168	—190	—160
II. Professional students recommended for A.M. on special courses of study . . . . .	13	14	5
Professional students recommended for Ph.D. on special courses of study . . . . .	3 16	1 15	2 7
Total number recommended for A.M., S.M., and Ph.D. . . . .	184	205	167
III. Harvard Bachelors of Arts or Science, not previously graduated elsewhere . . . . .	50	51	44
Harvard Bachelors of Arts or Science, previously graduated elsewhere . . . . .	1	4	—
Students not Harvard Bachelors of Arts or Science . . . . .	133	150	123
	—184	—205	—167

TABLE IX.—DIVISIONS AND DEPARTMENTS IN WHICH RECOMMENDATIONS FOR THE HIGHER DEGREES WERE MADE IN 1912

Division	Department	Degrees	
		A.M.	Ph.D.
Semitic Languages and History . . . . .		1	—
Ancient Languages . . . . .		4	3
Modern Languages			
English . . . . .		23	4
Germanic Languages and Literatures . . . . .		2	2
French, and other Romance Languages . . . . .		11	2
Comparative Literature . . . . .		1	—
In more than one Department . . . . .		1	—
Total in Modern Languages . . . . .		— 38	— 8
History, Government, and Economics			
History . . . . .		12	5
Government . . . . .		6	1
Economics . . . . .		11	1
Total in History, Government, and Economics . . . . .		— 29	— 7
Philosophy . . . . .		16	6
Education . . . . .		6	1
Music . . . . .		3	—
Mathematics . . . . .		2	1
Physics . . . . .		1	—
Chemistry . . . . .		4	4
Biology			
Botany . . . . .		6	1
Zoölogy . . . . .		2	3
Total in Biology . . . . .		— 8	— 4
Geology . . . . .		5	—
Anthropology . . . . .		2	—
Medical Sciences . . . . .		1	2
Undivisional . . . . .		4	—
Professional Students:			
Divinity School . . . . .		5	2
Total . . . . .		129	38

The degree of Doctor of Philosophy was conferred upon the thirty-eight men named below.

**GEORGE PLIMPTON ADAMS, A.B. 1904 (1903), A.M. 1907.**

*Subject, Philosophy. Special Field, Metaphysics. Thesis, "An Interpretation and Defence of the Principle of Idealism in Metaphysics." Assistant Professor of Philosophy, University of California.*

**ROGER ADAMS, A.B. 1909, A.M. 1910.**

*Subject, Chemistry. Special Field, Organic Chemistry. Thesis, I. "A Study of the Solubilities in Aqueous Alkalis of various Hydrasones of certain Aromatic Ortho-Hydroxyaldehydes and Ketones." II. "Nonanes." III. "A New Bottling Apparatus." Parker Fellow, at Bonn.*

**WALTER THEODORE BROWN, A.B. (Univ. of Toronto) 1907, A.M. (ibid.) 1908, A.M. (Harvard Univ.) 1911.**

*Subject, Philosophy. Special Field, Ethics. Thesis, "Studies in Individualism." Instructor in Philosophy, Bowdoin College.*

**ROBERT OSCAR BUSEY, A.B. (Univ. of Illinois) 1900, A.M. (Harvard Univ.) 1906.**

*Subject, Philology. Special Field, Germanic Philology. Thesis, "Observations on the Language of Georg Rudolf Weckherlin." Assistant Professor of German, Ohio State University.*

**EDMUND TROWBRIDGE DANA, A.B. 1909, A.M. 1910.**

*Subject, Philosophy. Special Field, Ethics. Thesis, "The True, the Right, and the Good." Cambridge.*

**TEIZABURO DEMURA, Gr., Theol. Course, Tohoku Gakuin, Japan, 1896, S.T.B. (Pacific Theol. Seminary) 1901, A.M. (Yale Univ.) 1902.**

*Subject, Philosophy. Special Field, Philosophy of Religion. Thesis, "The Nature of Religious Truth." Professor of Philosophy, Tohoku Gakuin, Sendai, Japan.*

**CARL SAWYER DOWNES, A.B. 1907, A.M. 1908.**

*Subject, Philology. Special Field, English Philology. Thesis, "Arnold's Poetry in its Relations to Romanticism." Instructor in English, University of Texas.*

**CURT JOHN DUCASSE, A.B. (Univ. of Washington) 1908, A.M. (ibid.) 1909.**

*Subject, Philosophy. Special Field, Metaphysics. Thesis, "The Fallacy of Counter-action, and its Metaphysical Significance." Instructor in Philosophy, University of Washington.*

**ARTHUR JOHNSON EAMES, A.B. 1908, A.M. 1910.**

*Subject, Biology. Special Field, Botany. Thesis, "The Morphology of Agathis australis (Lamb.) Steud." Instructor in Botany, Cornell University.*

**GUSTAVUS JOHN ESSELEN, Jr., A.B. 1909, A.M. 1911.**

*Subject, Chemistry. Special Field, Organic Chemistry. Thesis, "Studies on Benshydrols. I. The Resolution of p-Aminobenshydrol into its Optical Isomers. II. The Splitting of Benshydrols by the Action of Bromine." Research Chemist, Research Laboratory, General Electric Company, West Lynn.*

**AUGUSTUS HENRY FISKE, A.B. 1901, A.M. 1902.**

*Subject, Chemistry. Special Field, Organic Chemistry. Thesis, I. "On certain Nitro Derivatives of Vicinal Tribrombenzol." II. "Decomposition of Tetrabromorthoquinone." III. "Hydrates of Sodium Carbonate and their Temperatures of Transition." Instructor in Chemistry, Harvard University.*

**FRED FORD FLANDERS, A.B. (State Coll. of Washington) 1902, A.M. (ibid.) 1905.**

*Subject, Chemistry. Special Field, Analytical Chemistry. Thesis, "The Determination and Metabolism of Benzoic Acid and Hippuric Acid." Chemist, Department of Standards, Massachusetts State Board of Insanity.*

**FRANCIS HOWARD FOBES, A.B. 1904, A.M. 1905.**

*Subject, Philology. Special Field, Classical Philology. Thesis, "De Libris aliquot Suetonianis." Instructor in Greek and Latin, Harvard University.*

- TOMLINSON FORT, A.B.** (*Univ. of Georgia*) 1906, A.M. (*ibid.*) 1909, A.M. (*Harvard Univ.*) 1910.  
*Subject, Mathematics. Special Field, Analysis. Thesis, "Problems connected with Linear Difference Equations of the Second Order with special Reference to Equations with Periodic Coefficients."* John Thornton Kirkland Fellow, at Göttingen.
- WALTER HOUGHTON FREEMAN, A.B.** 1906 (1905), A.M. 1906.  
*Subject, Philology. Special Field, Classical Philology. Thesis, "De Textus Ovidi Carminum Amatoriorum Historia."* Instructor in Greek, Grinnell College.
- ISAAC GOLDBERG, A.B.** 1910, A.M. 1911.  
*Subject, Philology. Special Field, Romance Philology. Thesis, "Don José Echegaray: A Study in Modern Spanish Drama."* Editor, *Young Men's Hebrew Association Review*, Boston.
- NORMAN SCOTT BRIEN GRAS, A.B.** (*Western Univ.*) 1906, A.M. (*ibid.*) 1906, A.M. (*Harvard Univ.*) 1909.  
*Subject, History. Special Field, Economic History. Thesis, "The Evolution of the English Corn Market, 1100-1700."* Assistant Professor of History, Clark College.
- ALFRED OTTO GROSS, A.B.** (*Univ. of Illinois*) 1908.  
*Subject, Biology. Special Field, Zoölogy. Thesis, "The Reactions of Arthropods to Monochromatic Lights of Equal Intensities."* Instructor in Biology, Bowdoin College.
- CARL HENRY IBERSHOFF, LITT.B.** (*Univ. of Michigan*) 1899.  
*Subject, Philology. Special Field, Germanic Philology. Thesis, "The Sources of Bodmer's Noah."* Instructor in German, University of Wisconsin.
- FRANKLIN PARADISE JOHNSON, A.B.** (*Univ. of Missouri*) 1908, A.M. (*Harvard Univ.*) 1910.  
*Subject, Medical Sciences. Special Field, Embryology. Thesis, "The Development of the Mucosa of the Digestive Tube in the Human Embryo, with Notes on the Effects of Distention of the Intestine upon the Shape of Villi and Glands."* Assistant Professor of Anatomy, University of Missouri.
- SIDNEY ISAAC KORNEHAUSER, A.B.** (*Univ. of Pittsburgh*) 1908, A.M. (*Harvard Univ.*) 1910.  
*Subject, Biology. Special Field, Zoölogy. Thesis, "A Comparative Study of the Chromosomes in the Spermatogenesis of Enchenopa binotata (Say) and Enchenopa (Campylenchia Stål) curvata (Fabr.)."* Edward William Hooper Fellow, at Halle.
- WILLIAM SETCHEL LEARNED, A.B.** (*Brown Univ.*) 1897, A.M. (*ibid.*) 1908.  
*Subject, Education. Special Field, Educational Organization. Thesis, "The Development of the Professional and Social Organization of Secondary Teachers in Germany."* Joseph Lee Fellow for Research in Education.
- WILBERT LORNE MACDONALD, A.B.** (*Univ. of Toronto*) 1908, A.M. (*Univ. of Wisconsin*) 1910.  
*Subject, Philology. Special Field, English Philology. Thesis, "The Beginnings of the English Essay."* Lecturer in English, University College, Toronto.
- MALCOLM LEOD MACPHAIL, A.B.** (*Franklin Coll., O.*) 1900, A.B. (*Boston Univ.*) 1901, Gr., *Auburn Theol. Seminary*, 1904, A.M. (*Harvard Univ.*) 1911.  
*Subject, Philosophy. Special Field, Social Ethics. Thesis, "Educated Men and the Church."* Pastor, First Presbyterian Church, North Side, Pittsburgh, Pa.
- PERCY ALVIN MARTIN, A.B.** (*Leland Stanford Jr. Univ.*) 1902, A.M. (*ibid.*) 1903, A.M. (*Harvard Univ.*) 1906.  
*Subject, History. Special Field, Italian History. Thesis, "The Biography of Matthew Schinner, Cardinal of Sion, with special reference to his Activity in Italy in the years 1510-1516."* Assistant Professor of European History, Leland Stanford Jr. University.
- SELDEN OSGOOD MARTIN, A.B.** (*Bowdoin Coll.*) 1903, A.M. (*Harvard Univ.*) 1904.  
*Subject, Economics. Special Field, Economic History. Thesis, "Recent Water Power Development in the United States."* Instructor in Commercial Organization, Harvard University, on leave of absence.

**SAMUEL ELIOT MORISON, A.B. 1908, A.M. 1909.**

*Subject, History. Special Field, American History. Thesis, "The Life and Correspondence of Harrison Gray Otis, 1785-1814."* John Harvard Fellow.

**SAMUEL COPELAND PALMER, A.B. (Swarthmore Coll.) 1895, A.M. (ibid.) 1907, A.M. (Harvard Univ.) 1909.**

*Subject, Biology. Special Field, Zoology. Thesis, "The Numerical Relations of the Histological Elements in the Vertebrate Retina."* Assistant Professor of Biology and Geology, Swarthmore College.

**WILLIS ALLEN PARKER, A.B. (State Normal School, Emporia, Kan.) 1909, A.M. (Harvard Univ.) 1911.**

*Subject, Philosophy. Special Field, Metaphysics. Thesis, "Pluralism and Irrationalism in the Philosophy of William James."* Professor of Philosophy, Pomona College.

**ROY MERLE PETERSON, A.B. (Coe Coll.) 1906, A.M. (Harvard Univ.) 1910.**

*Subject, Philology. Special Field, Classical Philology. Thesis, "De Vaticiniis apud Poetas Graecos."* Professor of Latin, Missouri Valley College.

**EUGENE LYMAN PORTER, A.B. 1904, A.M. (Univ. of Michigan) 1908.**

*Subject, Medical Sciences. Special Field, Physiology. Thesis, "Conditions affecting the Liminal Electrical Stimulus of a Spinal Reflex."* Research Fellow in Physiology.

**JOHN EDWARD ROUSE, A.B. (Lincoln Coll.) 1894, A.M. (Univ. of Kansas) 1896, A.M. (Harvard Univ.) 1901.**

*Subject, Philosophy. Special Field, Psychology. Thesis, "The Mental Life of Domestic Pigeons: An Experimental Study of certain Emotional and Associative Processes."* Student, Harvard Graduate School of Medicine.

**EDGAR FINLEY SHANNON, A.B. (Central Univ. of Kentucky) 1893, A.M. (Harvard Univ.) 1910.**

*Subject, Philology. Special Field, English Philology. Thesis, "The Influence of Ovid upon Chaucer."* Professor of English, University of Arkansas.

**MARLON ELLWOOD SMITH, A.B. (Syracuse Univ.) 1906, A.M. (Harvard Univ.) 1909.**

*Subject, Philology. Special Field, English Philology. Thesis, "A History of the Fable in English to the Death of Pope."* Assistant Professor of English, Syracuse University.

**HARRY MAXWELL VARRELL, A.B. (Bowdoin Coll.) 1897, A.M. (ibid.) 1900, A.M. (Harvard Univ.) 1909.**

*Subject, History. Special Field, English History. Thesis, "The Early History of Ecclesiastical Jurisdiction in England."* Instructor in History, Simmons College.

**SAMUEL MONTEFIORE WAXMAN, A.B. 1907, A.M. 1910.**

*Subject, Philology. Special Field, Romance Philology. Thesis, "Chapters on Magic in Spanish Literature."* Instructor in Romance Languages, Boston University.

**FRANCIS HARDING WHITE, A.B. (Princeton Univ.) 1887, A.M. (Harvard Univ.) 1898.**

*Subject, Political Science. Special Field, American Government. Thesis, "The Administration of the General Land Office."* Professor of History, Pomona College.

**CARTER GODWIN WOODSON, LITT.B. (Berea Coll.) 1903, A.B. (Univ. of Chicago) 1907, A.M. (ibid.) 1908.**

*Subject, History. Special Field, American History. Thesis, "The Disruption of Virginia."* Teacher of History and French, M Street High School, Washington, D. C.

TABLE X. — FELLOWSHIPS AND SCHOLARSHIPS (1910-13)

1. *Applications and Appointments*

	1910-11	1911-12	1912-13
Spring applicants for reappointment or promotion .....	59	73	78
Spring applicants for a first appointment .....	300	285	306
Later applicants .....	39	40	21
	—398	—398	—405
Appointed to fellowships .....	24	47	55
Appointed to scholarships .....	91	88	87
Appointed instructors, teaching fellows, or assistants .....	32	33	37
	—147	—168	—179
Deduct for repetitions .....	1	3	2
	—146	—165	—177
Entered or continued in the Graduate School of Arts and Sciences without receiving any of the above-named appointments .....	68	72	70
Entered undergraduate classes of Harvard College .....	2	0	0
Entered other Departments of the University .....	8	5	2
	— 78	— 77	— 72
Applicants who were at the University in the year following their applications .....	224	242	249
Applicants not at the University in that year .....	174	156	156
	—398	—398	—405

*2. Classification of Applicants and Appointees*

	1910-11		1911-12		1912-13	
	Applicants	Appointees	Applicants	Appointees	Applicants	Appointees
Students of Philology .....	161	44	121	38	140	42
Students of History, Political Science, Philoso- phy, or Education .....	131	40	168	55	159	53
Students of Mathematics, Physics, or Chemis- try .....	67	20	66	27	65	23
Students of Natural History .....	32	10	36	14	34	21
Students of other branches, or unclassified ..	7	1	7	1	7	3
	398	115	398	135	405	142
Students in Graduate School of Arts and Sciences .....	131	53	129	51	138	72
Students in Harvard College .....	22	4	18	5	18	11
Students in other Departments of the Univer- sity .....	5	-	2	-	4	-
Former students in some Department of the University .....	33	8	37	9	36	9
Persons never previously members of the Uni- versity .....	207	50	212	70	209	50
	398	115	398	135	405	142
Harvard Bachelors of Arts or Science, not pre- viously graduated elsewhere .....	37	18	41	17	36	22
Harvard Bachelors of Arts or Science pre- viously graduated elsewhere .....	6	3	3	1	3	3
Graduates of other institutions, not Harvard Bachelors of Arts or Science .....	298	70	303	93	282	83
Undergraduates of Harvard College or Law- rence Scientific School, not already gradu- ated elsewhere .....	21	4	18	4	18	11
Undergraduates of other institutions and other non-graduates .....	36	20	33	20	66	23
	398	115	398	135	405	142

Forty-six fellowship were assigned for the year 1911-12, including three John Harvard Fellowships without stipend. There were nineteen resident and twenty-seven non-resident appointments. A list of the incumbents follows. After the name of each fellow is given the name of his fellowship, the subject that he studied, and his present occupation. The place of study of the non-resident fellows is also indicated.

TRAVELLING FELLOWS

- EDWARD SWITZER ALLEN**, John Harvard Fellow. Mathematics. Rome.  
Rogers Fellow, at Rome.
- ROBERT PIERPONT BLAKE**, John Harvard Fellow. Ancient History. St. Petersburg.  
Instructor in History, University of Pennsylvania.
- ALBERT RICHARD CHANDLER**, Parker Fellow. Philosophy. Marburg.  
Assistant in Philosophy. Third-year Graduate Student.
- ALEXANDER FREDERICK BRUCE CLARK**, Francis Parkman Fellow. Romance Languages. Paris and Madrid.  
Thayer Fellow. Third-year Graduate Student.
- CHARLES SAGER COLLIER**, Frederick Sheldon Fellow. Economics and Government. Paris.  
Student, Harvard Law School.
- HARRY TODD COSTELLO**, Frederick Sheldon Fellow. Philosophy. Paris.  
Assistant in Philosophy.
- HENRY WADSWORTH LONGFELLOW DANA**, Frederick Sheldon Fellow. Comparative Literature. Paris.  
Instructor in English and Comparative Literature, Columbia University.
- EDWARD CARROLL DAY**, Parker Fellow. Zoölogy. Bonn.  
Frederick Sheldon Fellow, at Berlin.
- GEORGE HAROLD EDGELL**, John Harvard Fellow. Fine Arts. Rome.  
Instructor in Fine Arts. Third-year Graduate Student.
- FREDERICK MAY ELIOT**, Frederick Sheldon Fellow. Municipal Government. London and other European cities.  
Instructor in Municipal Government.
- GRIFFITH CONRAD EVANS**, Frederick Sheldon Fellow. Mathematics. Rome.  
Assistant Professor of Mathematics, Rice Institute, Houston, Texas.
- DONALD FISHER**, James Walker Fellow. Philosophy. Berlin and Freiburg.  
Assistant in Philosophy. Fifth-year Graduate Student.
- NORMAN SCOTT BRIEN GRAS**, Frederick Sheldon Fellow. Economic History. London.  
Assistant Professor of History, Clark College.
- WILLIAM CASPAR GRAUSTEIN**, Rogers Fellow. Mathematics. Bonn.  
Frederick Sheldon Fellow, at Bonn.
- CLARENCE HENRY HARING**, Bayard Cutting Fellow. History. Berlin and Seville.  
Associate in History, Bryn Mawr College.
- CLARENCE LEONARD HAY**, Fellow in Central American Archaeology. Anthropology. Belize.  
Continuing his studies at Washington, D. C.
- HAROLD NEWCOMB HILLEBRAND**, Frederick Sheldon Fellow. English. London.  
Assistant in English. Fourth-year Graduate Student.
- HENRY LAURENS**, John Thornton Kirkland Fellow. Zoölogy. Bonn.  
Instructor in Zoölogy, Yale University.
- JOHN AVERY LOMAX**, Frederick Sheldon Fellow. American Ballads. Austin, Texas.  
Assistant Professor of English, University of Texas.
- SERGIUS MORGULIS**, Frederick Sheldon Fellow. Zoölogy. Charlottenburg.  
Associate in Animal Metabolism, Nutrition Laboratory of the Carnegie Institution of Washington, Vila St., Boston.

- LAURENCE BRADFORD PACKARD**, Rogers Fellow. History. Paris.  
Assistant in History. Fourth-year Graduate Student.
- DEXTER PERKINS**, James H. Hyde Fellow at the École Libre des Sciences Politiques. History and Government. Paris.  
Appointment continued.
- CHAUNCEY J VALLETTE PETTIBONE**, Frederick Sheldon Fellow. Biochemistry. Halle.  
Instructor in Physiology and Biochemistry, Medical School, University of Minnesota.
- JAMES HAMILTON PICKEN**, Christopher M. Weld Scholar. Philosophy. Berlin.  
Fourth-year Graduate Student.
- CYRUS ASHTON ROLLINS SANBORN**, Frederick Sheldon Fellow. Classics. Paris.  
Continuing his studies in the American School, Athens.
- THORBERGUR THORVALDSON**, Edward William Hooper Fellow. Chemistry. Dresden.  
Frederick Sheldon Fellow, at Liverpool.
- GEORGE ARTHUR UNDERWOOD**, Parker Fellow. Romance Languages. Paris.  
Instructor in Romance Languages, University of Missouri.

#### RESIDENT FELLOWS

- ROGER ADAMS**, Edward Austin Fellow. Chemistry.  
Parker Fellow, at Berlin.
- WILLIAM T BOVIE**, Edward Austin Fellow. Botany.  
Reappointed.
- THOMAS KITE BROWN, Jr.**, Thayer Fellow. German.  
Instructor in German, Haverford College.
- LLOYD MORGAN COSGRAVE**, Henry Lee Memorial Fellow. Economics.  
Instructor in Economics. Third-year Graduate Student.
- EDWIN DEWITT DICKINSON**, Oslas Goodwin Memorial Fellow. International Law.  
Reappointed. Second-year Graduate Student.
- WILFRED ELDRED**, Harris Fellow. Economics.  
Assistant in Economics. Third-year Graduate Student.
- MENDAL GARBUTT FRAMPTON**, Willard Scholar. English.  
Professor of the English Language, Pomona College.
- RALPH EMERSON HEILMAN**, Robert Treat Paine Fellow. Social Science.  
Instructor in Economics. Fourth-year Graduate Student.
- YAMATO ICHIHASHI**, Henry Bromfield Rogers Memorial Fellow. Ethics in its relations to Sociology.  
Continuing his studies towards the degree of Ph.D.
- WILLIAM SETCHEL LEARNED**, Edward Austin Fellow. Education.  
Joseph Lee Fellow for Research in Education.
- THOMAS COOKE MCCracken**, South End House Fellow in Social Education. Social Education.  
Research Secretary of the Education Department, Women's Municipal League, Boston.  
Fourth-year Graduate Student.
- WILLIAM THOMAS MORGAN**, Adams Woods Fellow. History and Government.  
Third-Year Graduate Student.



DANA BRANNAN MURDOCK, South End House Fellow. Social Problems.  
Director, South Bay Union, Boston.

NILS ANDREAS OLSEN, Edward Austin Fellow. History.  
Herscher, Ill.

ROY MERLE PETERSON, Thayer Fellow. Classics.  
Professor of Latin, Missouri Valley College.

WILLIAM GORDON PETERSON, Thayer Fellow. History.  
Officer in the Canadian Permanent Force, at Halifax, N. S.

GARNETT GLADWIN SEDGEWICK, Thayer Fellow. English.  
Edward Austin Fellow. Third-year Graduate Student.

MAHLON ELLWOOD SMITH, Harris Fellow. English.  
Assistant Professor of English, Syracuse University.

HOWARD MOFFITT TRUEBLOOD, John Tyndall Scholar. Physics.  
Bayard Cutting Fellow for Research in Physics. Fourth-year Graduate Student.

The members of the Administrative Board for 1911-12 were Professors Jackson, Mark, G. F. Moore, B. O. Peirce, H. W. Smyth, Kittredge, Turner, Walz, Osterhout, R. B. Perry, and the Dean. Seven meetings were held during the year. The opening meeting of the Graduate School of Arts and Sciences and of the Graduate Schools of Applied Science and Business Administration was held in the Faculty Room on the evening of Friday, October 6, 1911. The chief address was by Professor Theodore W. Richards, who discussed the general importance of chemical studies. Professor Willy Kükenthal of the University of Breslau, Exchange Professor of Zoölogy, also spoke briefly.

From every point of view the most important event in the history of the Graduate School of Arts and Sciences during the past year has been the gift of the Harry Elkins Widener Memorial Library. This munificent gift will not only house adequately and safely the great collections upon which the advanced work of the University chiefly rests, but will also enormously enlarge the opportunities for their use on the part of professors and advanced students. In spite of the limitations and inconveniences of Gore Hall, the ready access to its shelves constituted one of the most important privileges which the Graduate School of Arts and Sciences has been able to offer, and the new seminary rooms and the increased facilities for private study in the stack will be of the greatest assistance in developing the higher work of the School. In its new home the Harvard Library will hold a unique position, at least among university libraries, for, while there are other libraries which are equally accessible and a few libraries which are larger, there is probably none which combines in the same degree one of the most valuable of existing collections of

books with great freedom of access on the part of professors and qualified students. Thus housed, the Harvard Library will be a resource of incalculable value to the University in attracting and holding the best men, both in its faculty and among its students.

As the resources of the library and the other opportunities for advanced work at Harvard become better known, we may expect an increasing resort to the University on the part of mature teachers and investigators who desire to spend a longer or shorter period of study and research in Cambridge. Such men will not be candidates for degrees or students in the ordinary sense, and it is worthy of serious consideration whether the University should not offer them its privileges without the payment of tuition fees. In individual cases this has sometimes been done, but never as a regular practice, nor in accordance with any fixed principle, and it would seem that the time has come for some general rule on the subject. I would suggest that the Faculty of Arts and Sciences be authorized to recommend to the Corporation for the privileges of the University, without the payment of tuition, men of established position as investigators or as college and university professors who do not desire to use their period of residence at the University in fulfilment of the conditions of candidacy for a degree. Nominations for this privilege could best be made by the Committee on Fellowships, after the consideration of each case by the department concerned. The number thus recommended would not be large in any one year, but such hospitality would be much appreciated and would tend to make the University more widely influential as a centre of learning.

From the point of view of both teaching and investigation, a most valuable feature of many American universities has been the sabbatical year, with its opportunities for travel, intellectual refreshment, and productive work. Its ultimate justification lies, of course, not in the convenience and pleasure of the professor, but in its contribution to his growth and efficiency, and it can accomplish its purpose only when advantage can be taken of it freely and frequently. Unfortunately the scale of university salaries taken in connection with the increased cost of living makes it in many cases impossible for professors to take their leave of absence as often as it is due, if indeed they can take it at all, and this is especially true in the earlier stages of a teacher's career, when a year of this sort is likely to yield the largest relative return. It might be seriously argued that the taking of sabbatical leave ought to be made compulsory; in any case it ought to be,

under ordinary conditions, always possible, and this cannot be the case so long as a large sacrifice of salary is required. It would be of distinct help to the higher work of the university if Harvard should adopt the practice which exists in certain other universities of giving full salary during the sabbatical year or at least during half of it.

The productive work of professors, both in residence and on leave, would be greatly forwarded by the establishment of a fund for the assistance of research on the part of the Faculty. The Frederick Sheldon Fund, together with the various endowed fellowships, makes satisfactory provision for our advanced students, as far as their investigations take them away from Cambridge; and a similar fund, or series of funds, could be of even more value in the case of the more experienced investigators who are permanently connected with the University. In many instances professors have been compelled to postpone or abandon important researches for lack of such opportunities for work at a distance as many of our students already possess. The Woodbury Lowery Fellowship, founded by the Duchess of Arcos, and held for the past two years by Professor Channing for the study of the Spanish sources of American history, is an admirable example of what can be done by a special endowment of this sort, and so also, in a different way, is the Walter Channing Cabot Fellowship, now held by Professor Royce. It is also important to remember that leisure, or at least relief from benumbing and time-consuming routine, is even more important than special collections or apparatus, and that American universities have generally been more generous in providing the material facilities for advanced work than in giving their professors the time to avail themselves of these facilities.

CHARLES H. HASKINS, *Dean.*

## THE GRADUATE SCHOOL OF APPLIED SCIENCE

TO THE PRESIDENT OF THE UNIVERSITY:—

SIR,—As Dean of the Graduate School of Applied Science, I have the honor to present the following report for the year 1911-12.

The enrolment by subject in the Graduate School of Applied Science was as follows:—

	1906-07	1907-08	1908-09	1909-10	1910-11	1911-12
Civil Engineering . . . . .	7	11	7	14	17	18
Mechanical Engineering . . . . .	0	4	4	7	3	6
Electrical Engineering . . . . .	2	7	11	17	15	15
Mining and Metallurgy . . . . .	3	12	14	18	26	14
Architecture . . . . .	7	12	15	5	20	29
Landscape Architecture . . . . .	4	7	6	9	13	9
Forestry . . . . .	5	7	10	12	19	19
Applied Physics . . . . .	0	1	1	1	0	1
Applied Chemistry . . . . .	1	1	1	0	1	2
Applied Zoölogy . . . . .	0	0	1	0	0	0
Applied Geology . . . . .	0	0	0	0	0	0
Applied Biology . . . . .	0	1	0	4	9	7
	<hr/> 29	<hr/> 63	<hr/> 70	<hr/> 87	<hr/> 123	<hr/> 120

Subsequent to the issue of the Catalogue there were twenty-four additional enrolments distributed as follows:—

Civil Engineering . . . . .	2
Mechanical Engineering . . . . .	2
Electrical Engineering . . . . .	2
Mining and Metallurgy . . . . .	6
Architecture . . . . .	7
Landscape Architecture . . . . .	1
Forestry . . . . .	1
Applied Physics . . . . .	1
Applied Biology . . . . .	2
	<hr/> 24

In several departments of the School the work is continuous throughout the calendar year. In Applied Biology, for reasons which are obvious and peculiar to that subject, special emphasis is laid on that period of the year which does not include the issue

of the Catalogue, — from the first of February to the first of November. The enrolments not coincident with the issue of the Catalogue are therefore to be given a weight in considering the activity of the School to which they would not otherwise be entitled.

Of this total enrolment one hundred and thirteen were regular students, and thirty-one were special students not candidates for degrees. All regular students were graduates of some college or technical school. Of the special students four were graduates of colleges or technical schools, and all had professional attainments entitling them to special consideration. No one was admitted to the School as a special student who was not mature in years and who had not had at least three years of professional training or who did not satisfy the Division in which his work lay of his special preparation to profit by the instruction, and to contribute by his presence rather than detract from the efficiency of the course.

Fifty-one colleges and technical schools were represented as follows: —

Albany State Normal College . . . . .	1	Middlebury College . . . . .	1
Allegheny College . . . . .	1	Norwich University . . . . .	1
Amherst College . . . . .	1	Ohio State University . . . . .	1
Biltmore Forest School . . . . .	1	Pennsylvania State College . . . . .	1
Bowdoin College . . . . .	1	Polytechnic Institute . . . . .	1
Brown University . . . . .	1	Princeton University . . . . .	1
Carleton College . . . . .	1	Randolph-Macon College . . . . .	1
Case School of Applied Science . . . . .	1	St. Lawrence University . . . . .	1
College of the City of New York . . . . .	1	St. Mary's College . . . . .	1
Colorado College . . . . .	1	St. Petersburg Institute of Tech-	
Columbia University . . . . .	1	nology . . . . .	1
Cornell University . . . . .	3	South Dakota State College . . . . .	1
Dartmouth College . . . . .	4	South Eastern Agricultural Col-	
Denison University . . . . .	1	lege (England) . . . . .	1
De Pauw University . . . . .	1	Stevens Institute of Technology . . . . .	1
Earlham College . . . . .	2	Swarthmore College . . . . .	1
Hamilton College . . . . .	1	Trinity College (Conn.) . . . . .	1
Harvard University . . . . .	67	Tufts College . . . . .	2
Heriot-Watt College (Edinburgh,		United States Naval Academy . . . . .	1
Scotland) . . . . .	1	University of Chicago . . . . .	1
Iowa State College . . . . .	1	University of Chile . . . . .	1
Japanese Naval College . . . . .	1	University of Michigan . . . . .	1
Lafayette College . . . . .	1	University of Minnesota . . . . .	1
Lake Forest College . . . . .	1	University of Wyoming . . . . .	1
Leland Stanford Jr. University . . . . .	2	Williams College . . . . .	2
Massachusetts Agricultural Col-		Worcester Polytechnic Institute . . . . .	1
lege . . . . .	2	Yale University . . . . .	4
Massachusetts Institute of Tech-			
nology . . . . .	1		

All the members of the staff of the School were in residence during the year. Professor Adams, who had received a sabbatical leave of absence, was unable to avail himself of the privilege. Indeed, it is a fact worthy of notice that in this, as in other laboratory subjects in the University, the instructors rarely avail themselves of the sabbatical privilege. Throughout the University the sabbatical year is regarded as an opportunity for research and study. This can be best done in a laboratory, and in general nowhere so well as in one's own laboratory. Of course exception is to be made to this in biological subjects calling for field work. The fact that there are so few sabbatical absences in scientific departments is therefore to be explained, neither by greater devotion to the University nor by less desire for research or special study, but rather by the nature of scientific investigations, and the fact that they are usually of long continuation and are essentially local in their pursuit.

During the academic year under review, a most important change in the organization of the School resulted from the following vote of the Corporation taken on the recommendation of the Administrative Board, after its approval by the Faculty of Arts and Sciences.

Voted under date of March 11, 1912: —

That certain Divisions and Departments in the Graduate School of Applied Science be organized as Schools: to wit: the School of Engineering, of Mining and Metallurgy, of Architecture and Landscape Architecture, of Forestry, of Applied Biology (Bussey Institution), — it being understood that additional schools of Applied Science may be hereafter organized.

That these Schools be grouped together as the Graduate Schools of Applied Science, under a separate Faculty, to administer a self-contained graduate programme.

That this organization go into effect at the beginning of the next academic year.

That the following disposition be made of the courses now open to undergraduates in Harvard College in the several Divisions concerned: —

#### ENGINEERING

That there be established in the Faculty of Arts and Sciences a Division of Engineering Sciences, and that the Degree with Distinction in Applied Mechanics be called the Degree with Distinction in Engineering Sciences.

That the following courses be withdrawn from the Faculty of Arts and Sciences:

Engineering 3*l*, 3*m*, 5*l*, 6*a*, 12*b*, 13*a*, 4*c* (courses now open to undergraduates) and all courses not open to undergraduates.

That the following courses be transferred to the Division of Engineering Sciences:

Engineering 3*k*, 5*k*, 4*a*, 4*d*, 11*a*, 16*a*, 10 (*a*, *b*, *c*, *e*).

#### MINING AND METALLURGY

That the following courses be withdrawn from the Faculty of Arts and Sciences:

Mining 1, 7, 8, 10; Metallurgy B, 11, 12, 14, 15, 17, 19 (courses now open to undergraduates) and all courses not open to undergraduates.

That Mining 2 be transferred to the Division of Geology, and that Mining 3 and Metallurgy 4 be transferred to the Division of Chemistry.

#### ARCHITECTURE AND LANDSCAPE ARCHITECTURE

That Architecture 1*a*, 1*b*, 1*c*, 2*a*, 2*b*, 3*b*, and Landscape Architecture 1 be transferred to the Department of Fine Arts and all other courses be withdrawn.

#### FORESTRY

That all courses be withdrawn from the Faculty of Arts and Sciences.

#### APPLIED BIOLOGY

That Zoölogy 20*d* and 20*f* and Botany 20*f* be withdrawn from the Faculty of Arts and Sciences.

That the courses in Engineering thus withdrawn be bracketed in the Elective Pamphlet of the Faculty of Arts and Sciences, with a note added that properly qualified Seniors may take the corresponding courses in the School of Engineering; this arrangement to be continued through the college year 1914-15.

This change of organization had its first consideration in the separate Divisions, the first to give its approval being the Division of Mining and Metallurgy. It was very shortly followed by the Division of Engineering and soon, although with some hesitation as to its effect, by the Division of Architecture and Landscape Architecture. Practically, Forestry has long been on such a basis. Complete separation of the work in Forestry has been necessitated by the fact that so large a part of its year is spent by the students away from Cambridge. To Applied Biology the change of organization was a matter of very minor moment.

By the initial organization of the Graduate School of Applied Science and by succeeding votes many courses had already been withdrawn from undergraduate election. By this vote four whole courses and three half-courses in Engineering, two whole courses

and nine half-courses in Mining and Metallurgy, five whole courses and one half-course in Architecture were withdrawn, intensifying the graduate nature of the courses in the technical sciences. The courses which remained as undergraduate courses were such as might reasonably compose a part of collegiate education for either a Bachelor of Arts or Bachelor of Science degree and are paralleled in other colleges not aiming toward technical training. These courses are far less technical and professional than many collegiate courses in other departments.

The organization of a separate Faculty for the Schools of Applied Science provided a more attentive body for the consideration of such business as should properly receive Faculty consideration. The Faculty of Arts and Sciences had throughout the undergraduate as well as the graduate life of the Scientific School given but scant consideration to such business. The real work of the School was therefore by necessity conducted in the Administrative Board, and thus lost the attention of all but the representatives of the several departments. This situation was contrary to the spirit of the organization of the University and certainly contrary to efficient legislation. It had the additional very great disadvantage of removing the thorough discussion of its problems from the immediate oversight of the President of the University.

The withdrawal of the courses from the Faculty of Arts and Sciences secured freedom from certain formal but trammelling conditions. Under the Faculty of Arts and Sciences courses of instruction, presumably units of related work, must be of either of two magnitudes, a half course or a whole course. In the several technical schools, where there are better opportunities for intimately following the programme of each student, such classification, devised for the sake of simplicity in numerical records, is not necessary. The magnitude of any course may be adapted to the subject to which it is devoted. The separate organization of the several schools further permitted the application, where such application was desirable, of the intensive method of instruction in which a part of the year should be wholly given to one subject. With this arrangement it became possible to secure a desirable sequence of courses. Still a third advantage lay in the opportunity which it afforded of continuing the work throughout the calendar year and of reducing all vacation periods.

On the recommendation of the Administrative Board of the School, the Corporation passed the following votes: —



Under date of March 11th, 1912: —

*Voted*, That the School of Engineering be authorized to seek to establish the use of the Engineering Camp by other colleges similar to its use by Harvard College, offering to such institutions facilities for independent final examinations, the opportunity to read independently such examination books as are set by the instructors in the course, or such other arrangements as the colleges may find necessary in order to allow the work to count towards their own degrees.

That students from any college formally adopting such an arrangement and counting the work in Engineering towards its degree be admitted to the School on the same basis, as regards tuition fee, as students from Harvard College.

That special fees be charged only to such students in the Camp as are not registered in the School of Engineering or have not paid a full year's tuition fee in Harvard College or one of the associated institutions, and that this special fee be refunded, when charged, should the student subsequently enter any of the Graduate Schools of Applied Science.

Under date of April 8th, 1912: —

*Voted*, on recommendation of the Administrative Board of the Graduate School of Applied Science, that the courses in the Graduate Schools of Applied Science be opened, with the consent of the instructor, to properly qualified graduate students in other institutions on the same basis as to students in other Graduate Schools in the University, — on application from the other institutions and without registration in the University.

These votes of the Corporation formally opened the way for the widest possible coöperation between Harvard University and other neighboring educational institutions.

The invitation contained in the first vote to share in the use of the Engineering Camp has been accepted by several institutions, and the undergraduate courses there given have been included in the programme of courses counting toward the Bachelor's degree in Brown University and in Tufts College. In the future administration of the Summer Engineering Camp the assisting instructors will be, so far as possible, chosen from the institutions joining in this arrangement, in order that they may have as complete an understanding as possible of the nature of the work being done.

The second of the above votes, which was instigated mainly by the possibilities offered by the High Tension Laboratory, has been welcomed by the instructors in several neighboring institutions, but it has not as yet been a matter of formal action. It is our hope that this relationship may be a mutual one and that the Graduate Schools of Applied Science may receive as well as extend such special privileges.

The gift, for the time being anonymous, of \$50,000, for a High Tension and High Frequency Electrical Laboratory, not merely gave promise of a unique equipment for the Department of Electrical Engineering but was peculiarly adapted to show the close relationship which should exist between the Applied and Pure Sciences in the University, that each had much to give to the other, and that their intimate physical relationship was of the utmost importance in the ultimate development of the scientific side of the University. In considering the question of a site, it was evident that such a laboratory should not merely be near the main laboratory for Electrical Engineering but should also be near the laboratory of the Department of Physics. The site chosen was at the south of Pierce Hall, and between it and the Physical Laboratory. The gift of the building was followed by a gift from another donor of \$12,000 for equipment.

Toward the end of the year it became evident to Professor Whipple that the work in Sanitary Engineering in the University could not be satisfactorily carried out on the basis of a half-time professorship, that it would need his full services, and that the department should be vigorously developed in respect to advanced instruction and research. To make this possible, Mr. Ernest B. Dane contributed \$5,000 for two years. This generous gift assured the University a development in Sanitary Engineering which would make the work of preëminent quality.

The year was one of reasonable growth in the number of students and corresponding increment in staff. There was also further relaxation in financial stringency under which some of the departments have been working. The School can happily look forward to this in increasing measure through the steady enlargement of its endowment by the McKay bequest.

WALLACE C. SABINE, *Dean.*

## THE GRADUATE SCHOOL OF BUSINESS ADMINISTRATION

TO THE PRESIDENT OF THE UNIVERSITY:—

SIR,—I have the honor of presenting my report upon the Graduate School of Business Administration for the academic year 1911-12, the fourth year of the School's existence.

The number of students registered is shown in the following comparative table, counting as "regular" students college graduates taking full work in the School:—

	Number of Students			
Regular students:	1908-09	1909-10	1910-11	1911-12
First-year .....	33	42	43	55
Second-year .....	..	8	10	10
	—33	—50	—53	—65
Special students:				
(a) College graduates taking partial work .....	25	15	15	12
(b) Not holding college degrees ....	22	26	26	19
	—47	—41	—41	—31
	—	—	—	—
Totals .....	80	91	94	96

### GRADUATES OF COLLEGES

Albion College .....	1	Princeton University .....	2
Amherst College .....	2	University of Georgia .....	1
Case School of Applied Science ..	1	University of North Carolina ...	2
Clark College .....	1	Université de Rennes (France) ...	1
DePauw University .....	1	University of Rochester .....	1
Earlham College .....	2	University of Southern California	1
Grinnell College .....	1	University of Wisconsin .....	1
Harvard University .....	46	West Virginia University .....	1
Lewis Institute .....	1	West Virginia Wesleyan College .	1
McGill University .....	1	Williams College .....	2
Parsons College .....	3	Yale University .....	2
Pennsylvania State College .....	1		—
Peking University .....	1		77

(24 colleges represented, as compared with 14 in 1908-09, 19 in 1909-10, and 22 in 1910-11.)

## Geographical distribution of students:—

STATES:		STATES:	
California .....	1	North Carolina .....	2
Connecticut .....	2	Ohio .....	3
Georgia .....	1	Pennsylvania .....	2
Illinois .....	4	Virginia .....	1
Indiana .....	4	West Virginia .....	1
Iowa .....	4	Wisconsin .....	1
Maine .....	3		
Maryland .....	1	FOREIGN COUNTRIES:	
Massachusetts .....	44	Canada .....	1
Michigan .....	2	China .....	3
Minnesota .....	1	France .....	1
Missouri .....	2	Germany .....	1
New York .....	10	Hawaii .....	1

(19 states and 5 foreign countries, as compared with 12 states and 2 foreign countries in 1908-09, 16 states and 5 foreign countries in 1909-10, and 20 states and 2 foreign countries in 1910-11.)

Average ages of students (taking age in years and months on dates of registration in each academic year):—

	1908-09	1909-10	1910-11	1911-12
First-year men .....	23.22 years	22.95 years	23.26 years	22.62 years
Second-year men .....	—	24.75 "	24.67 "	25.69 "
Special students .....	31.65 years	32.06 "	31.68 "	28.34 "
With degree .....	30.11 "	27.89 "	27.63 "	27.43 "
Without " .....	32.66 "	34.47 "	34.01 "	28.91 "

The degree of Master in Business Administration was conferred in June, 1912, upon eight men, Bradshaw Langmaid receiving this degree "*with distinction*." The names of the graduates and the subjects of the graduation theses are as follows:—

Sterling Ruffin Carrington, A.B. (*Univ. of North Carolina*) 1910.

Thesis subject: "A Study of the Problems involved in a Specialty Store handling Women's Apparel doing its own Manufacturing."

Bradshaw Langmaid, A.B. 1911.

Thesis subject: "The Principles underlying the Reasonableness in and of itself of any given Competitive Rate."

Charles LeDeuc, B.-ES-L.-PHIL. (*Univ. de Rennes*) 1899, D.ECON. (*ibid.*) 1905.

Thesis subject: "The Relation of Cost of Service to Rate-Making."

William Wirt Leonard, A.B. (*Princeton Univ.*) 1896.

Thesis subject: "Offset Printing."

Eliot Grinnell Mears, A.B. 1910.

Thesis subject: "Stockholders' Privileged Subscriptions, 1906-11, inclusive: their effect on the Market Price of the Stocks."

Konrad Foeste Schreier, A.B. (*Univ. of Wisconsin*) 1910.

Thesis subject: "State Banks and Trust Companies in Wisconsin."

Warren Bostwick Strong, A.B. 1910.

Thesis subject: "The Northwestern Trust Company of Saint Paul and other Trust Companies in the State of Minnesota."

Carl Stewart Whittier, A.B. 1911.

Thesis subject: "The Delivery System of the Mail Order Houses, with Special Reference to the Parcels Post."

The two prizes of one hundred dollars and fifty dollars, offered annually by Mr. George Oliver May of New York, for the two best graduation theses, were awarded to Mr. Carl Stewart Whittier and Mr. John Edward Hyde.

Mr. Hyde is the only person not holding a college degree who has thus far been permitted to take the regular two-year course. Experience has confirmed the wisdom of the School's regulation that ordinarily special students not graduates of an approved college will be permitted to take not more than a total of two courses, whether in the same year or in successive years. Nevertheless, the provision admitting mature men not holding college degrees is avowedly based upon the assumption that in determining upon the admission of students it is wise to give weight to various factors in addition to the previous academic history of the applicant. It is therefore reasonable that the extent of the privileges of such special students be variable, depending upon all the facts of each particular case, and that a man whose record in this School has been exceptionally good should be permitted to take more courses than the maximum number to which special students are ordinarily limited. It is gratifying to be able to report that the first man of this class to enjoy the full privileges of the School has met the expectations of his instructors.

The five University Scholarships for the year 1911-12 were awarded as follows:—

Sterling Ruffin Carrington, A.B. (*Univ. of North Carolina*) 1910.

George Ellsworth Thomas Cole, A.B. (*Clark Coll.*) 1911.

Eli Mannus Libbman, A.B. 1912 (1911).

Arthur Lister Ræ, A.B. (*Williams Coll.*) 1911.

Carl Stewart Whittier, A.B. 1911.

The following changes in courses were made from 1910-11: Business 20c (An Introduction to the Technique of Printing) was lengthened to a full course; Business 22 (Banking), advanced course, was shortened to a half-course; Business 18 (Industrial Organization), advanced course, was omitted. The following courses which were omitted in 1910-11 were given during the present year: Business 12<sup>a</sup> (Economic Resources and Commer-

cial Policy of the Chief European States); Business 27<sup>1</sup> (Railroad Organization and Finance).

The following courses were given for the first time: Business 15<sup>2</sup> (Business Policy), Mr. Shaw, assisted by Mr. Martin; Business 17b<sup>2</sup> (Industrial Organization), Mr. Feiker and others; Business 19<sup>1</sup> (The Practice of Scientific Management), Messrs. Barth, Cooke, Hathaway, and S. E. Thompson; Business 20d (Business Practice in Printing), advanced course, Mr. C. C. Lane.

The advisory committee of business men for the printing and publishing courses has been fortunate in securing the following additions to its committee:—

Mr. Theodore L. DeVinne of New York, honorary member.

Mr. J. Stearns Cushing of Norwood, Mass., President of United Typothetae of America.

Mr. Albert W. Finlay of Boston, Secretary and Manager, George H. Ellis Company.

Mr. William B. Howland of New York, Treasurer, *The Outlook*.

Mr. Edward L. Stone of Roanoke, Va., President of Stone Printing and Manufacturing Co.

The coöperative lecture courses in which business men assist as specialists have been conducted with increasing success. As was indicated in last year's report, changing conditions necessitate alterations from time to time in the amount of such outside assistance in any particular course. During the past year Business 14<sup>2</sup> (Economic Resources and Commercial Organization of Central and South America) and Business 25 (Corporation Finance) have had a much smaller number of outside lecturers than in previous years. The following lists, however, indicate the important part in the School's instruction during 1911-12 contributed by business men of large experience:—

#### BUSINESS 1: ACCOUNTING PRACTICE

Frank E. Webner of New York: "My Experience as a Cost Accountant."

#### BUSINESS 11: PROBLEMS OF COMMERCIAL ORGANIZATION

Harry Hodgson of Athens, Ga.: "The Manufacture and Sale of Commercial Fertilizers."

A. C. McGowin of Philadelphia: "A Discussion of Shoe Store Methods."

M. C. Rorty of New York: "Analytical Methods in Commercial Work."

J. R. Simpson of Boston: Five lectures on "Practical Problems of Department Store Organisation and Management."

Thomas W. Slocum of New York: "Office Management."

**BUSINESS 14 <sup>1</sup>/<sub>2</sub>: ECONOMIC RESOURCES AND COMMERCIAL ORGANIZATION  
OF CENTRAL AND SOUTH AMERICA**

W. C. Downs of New York: "The Commission House in Latin American Trade"; "Latin American Trade Problems."

**BUSINESS 15 <sup>1</sup>/<sub>2</sub>: BUSINESS POLICY**

Walter H. Cottingham of Cleveland, O.: "Distribution of a Commodity (paint) direct from Producer to Dealer" (two lectures).

R. H. Grant of Dayton, O.: "Organization and Handling of the Sales Force."

J. B. Hayward of New York: "The Policy of the Management toward the Competitor."

John S. Lawrence of Boston: "Distribution of a Commodity (textiles) by Middlemen, particularly the Selling Agent."

**BUSINESS 17a <sup>1</sup>/<sub>2</sub>: INDUSTRIAL ORGANIZATION**

M. W. Alexander of Lynn: "Decentralized Management, as Exemplified by the General Electric Company."

Carl G. Barth of Philadelphia: "The Planning Department."

C. C. Batchelder of Boston: "Experience in Handling Two Strikes in the Lumber Business"; "Industrial Combinations in the Lumber Trade."

M. L. Cooke of Philadelphia: "The Essentials of Scientific Management."

Charles Day of Philadelphia: "Locating a Factory"; "Building a Plant."

W. C. Fish of Lynn: "Relations of Employer and Employee."

H. L. Gantt of New York: "The Task as a Basis of Proper Management"; "Preparing for Task Work."

C. B. Going of New York: "A Typical Factory Organization"; "The Profession of the Industrial Engineer."

H. K. Hathaway of Philadelphia: "Scientific Management as Practised at the Tabor Manufacturing Company."

W. J. Hoggson of New York: "Office Organization."

J. T. Lincoln of Fall River: "The Relation of the Employer and Employee," with illustrations from the relations in the cotton industry in Fall River.

W. C. Redfield of New York: "Industrial Self-help."

Russell Robb of Boston: "Organization."

J. E. Sterrett of New York: "How a General Manager uses Accountants' Reports."

F. W. Taylor of Philadelphia: "Task Management"; "Task System and the Workmen"; "Factory Organization and Functional Foremanship."

**BUSINESS 17b <sup>1</sup>/<sub>2</sub>: INDUSTRIAL ORGANIZATION**

Frederick M. Feiker of Chicago: conduct of field work in course for six weeks, ending March 8, 1912.

Charles Day of Philadelphia: "Designing Industrial Plants."

H. K. Hathaway of Philadelphia: "Administration of the Tool Room."

Everett Morss of Boston: "Employers' Relations with Employees."

W. E. C. Nazro of Plymouth: "Relations of the Employer with the Employee."

C. K. Tripp of Lynn: "Apprenticeship System and Training School of the General Electric Company."

**BUSINESS 19<sup>1</sup>/<sub>2</sub>: THE PRACTICE OF SCIENTIFIC MANAGEMENT**

- Carl G. Barth of Philadelphia: "Classifying Stores"; "Stores Records"; "Laying out the Store Room"; "Installation of Stores Systems."  
M. L. Cooke of Philadelphia: "Mechanical Handling of Stores"; "Standardization."  
H. K. Hathaway of Philadelphia: "Tool Room Administration"; "Classifying Tools."  
Sanford E. Thompson of Newton Highlands: Special instruction in time-study in course for six weeks.

**BUSINESS 20c: AN INTRODUCTION TO THE TECHNIQUE OF PRINTING**

- H. L. Baker of New York: "Cylinder Presses: Flat Bed and Rotary."  
A. E. Barter of Norwood, Mass.: "Binding."  
H. L. Bullen of Jersey City: "Job and Specialty Printing."  
J. C. Dana of Newark, N. J.: "Introductory Lecture."  
C. W. Davis of Harrisburg, Pa.: "Cost Accounting as Applied to the Printing Business."  
A. W. Elson of Boston: "Reproducing Processes."  
A. W. Finlay of Boston: "Printing Office Organization."  
E. B. Hackett of New Haven, Conn.: "Preparation of Manuscript"; "Proofs."  
H. B. Hatch of Philadelphia: "Electrotyping."  
W. C. Huebner of Buffalo: "Offset Printing."  
Frank T. Hull of Cambridge: "The Comparative Cost of Hand and Machine Composition."  
H. L. Johnson of Boston: "Principal Printing Offices of the World."  
C. E. Mason of Boston: "Paper Making."  
J. H. McFarland of Harrisburg, Pa.: "Printing Office Management."  
H. M. Plimpton of Norwood, Mass.: "Book Binding."  
Professor W. C. Sabine: "The Physics of the Three-color Process."  
Charles Schweinler of New York: "Magazine Printing."  
W. S. Timmis of New York: "Printing Office Construction."  
J. A. Ullman of New York: "Printing Ink."  
D. B. Updike of Boston: "Type and Composition."  
W. B. Wheelwright of Boston: "Physical Qualities of Paper"; "Paper Making from Printer's Standpoint."

**BUSINESS 20d: BUSINESS PRACTICE IN PRINTING (ADVANCED COURSE)**

- Bruce Rogers of Boston: "Conduct of Laboratory Work," in course from October to December, 1911, inclusive.

**BUSINESS 21: BANKING**

- Roger W. Babson of Wellesley Hills: "Commercial Paper."  
Ralph May of Boston: "Commercial Paper."

**BUSINESS 25: CORPORATION FINANCE**

- Eliot Wadsworth of Boston: "Street Railway Financing."

**BUSINESS 28: RAILROAD OPERATION**

- F. G. Athearn of San Francisco, Cal.: "The Work of the Bureau of Economics of the Southern Pacific Railroad Company."



- W. G. Bealer of New York: "Some Phases of Emergency Railroad Work."  
 Major Charles Hine of Chicago: "The Unit System of Railroad Operating Organization."  
 George B. Leighton of Monadnock, N. H.: "Railway Track and Loading Gauges."  
 J. F. Moore of New York: "The Railroad Y. M. C. A. and its Relation to Operation."  
 L. G. Morphy of Boston: "Organization of Maintenance of Way Forces."  
 Edmund Rice of Boston: "Organization of the Purchasing and Equipment Departments."

BUSINESS 35b <sup>1</sup>/<sub>2</sub>: LIFE INSURANCE

James E. Rhodes, 2d, of Hartford, Conn.: "Liability Insurance."

The School was also able to secure a lecture of general business interest, open to the students of the University, by Mr. J. Horace McFarland, President of the Mount Pleasant Press, Harrisburg, Pa., on "Printing as a Profession."

The following should be added to the lists of firms in previous reports which have agreed to allow their plants to be inspected and studied by students of the School: —

Aetna Mills, Watertown.  
 American Tool and Machine Co., Hyde Park.  
 American Type Founders' Co., Jersey City.  
 Ayer and Co., Boston.  
 Baldwin Locomotive Company, Philadelphia.  
 Chadbourne and Moore, Chelsea.  
 Champion International Paper Co., Lawrence.  
 Chapple Publishing Co., Dorchester.  
 Curtis Publishing Co., Philadelphia.  
 Folsom and Sunergren Co., Boston.  
 H. C. Hansen Type Foundry, Boston.  
 A. H. Hews and Co., Inc., Cambridge.  
 Hirsch and Guinsburg, Medway.  
 Holtzer-Cabot Electric Co., Boston.  
 Irving and Casson, East Cambridge.  
 Lawrence Dye Works Co., Lawrence.  
 Link-Belt Co., Philadelphia.  
 A. D. Little Paper Testing Laboratory.  
 Ludlow Manufacturing Associates, Boston.  
 Magee Furnace Co., Chelsea.  
 Manhattan Market, Cambridge.  
 Merrymount Press, Boston.  
 M. A. Packard Co., Brockton.  
 Revere Sugar Refinery, East Cambridge.  
 Charles Schweinler Press, New York.  
 Simplex Electric Heating Co., Cambridge.  
 D. and L. Slade Co., Revere.

Tabor Manufacturing Co., Philadelphia.  
 Union Carpet Lining Co., Watertown.  
 United States Worsted Co., Lawrence.  
 Wachusett Shirt Co., Leominster.  
 Walker Pratt Manufacturing Co., Watertown.  
 Walworth Manufacturing Co., South Boston.  
 Ward Corby Co., Cambridge.  
 Williams Printing Co., New York.

An encouraging beginning was made during the year in the undertaking to secure a permanent endowment fund for the School. A gift of one hundred and twenty-five thousand dollars (\$125,000) was received from Mr. Edmund Cogswell Converse of New York to endow a professorship of banking. This generous and most opportune gift is the more welcome since it comes from a man of the highest character and standing, and expresses his confidence in the value of the training this School is attempting to provide as a preparation for a business career.

Attention was called in last year's report to the establishment in this School of the Shaw Fund for Business Research. This gift was made because of the donor's conviction that the individual business concern is not generally in a position to make a painstaking and systematic investigation of the conditions prevailing in his own line of business and that, with the exception of the national government which has thus far not undertaken work of this kind, no other institution is so well fitted to conduct such research as a high-grade school of business administration. Realizing that there is a special need for real facts about the different methods of market distribution, this field was selected as the first one to be investigated. For various reasons it was decided to begin with a study of retail conditions in the boot and shoe industry. On account of the variations in book-keeping on the part of shoe retailers it was absolutely essential in the first instance to devise a uniform system of accounts. This was done during the year 1910-11 through the coöperation of shoe retailers and accountants (among the ablest in the country) with members of the School's teaching staff who had already consulted with scores of shoe retailers in different parts of the country.

The past year has been devoted to introducing this system of accounts among such retailers as agree in return to furnish to this School their semi-annual figures made up on this basis. All individual data are and always will be held in strictest confidence by the School, but it is planned to prepare tables of averages and percentages which will be significant as to the prevailing and the

possible costs of doing a retail shoe business. Such information will be issued in bulletin form to all coöperating retailers who will thus have the same kind of information about their business which railway managers of today have about their own and other roads through the medium of the published uniform railroad accounts.

A large number of shoe retailers in all parts of the country are coöperating with the School in this important undertaking and it is interesting to find that from returns already received from dealers tendencies toward certain standards can be noted.

This service to business men is, of course, but one function of the Bureau of Business Research. It has other functions of vital importance to the School. Obviously, it will furnish authoritative information on fundamental subjects taught in the School. But perhaps of still greater value is the spur it applies and the training it gives to members of the instructing staff in personally conducted investigations into modern business organization and methods, and its contribution toward an even more thoroughgoing application of the problem method of instruction to which the School is committed.

EDWIN F. GAY, *Dean.*

## THE DIVINITY SCHOOL

TO THE PRESIDENT OF THE UNIVERSITY: —

SIR, — As Dean of the Divinity School I have the honor to present the following report for the year 1911-12.

The most significant events of the year were the instituting of a new degree of S.T.M. to be administered by our Faculty, and a change in our requirements for the degree of S.T.B. For many years, an arrangement with the Graduate School has permitted students registered in the Divinity School to become candidates for the degrees of A.M. and Ph.D. under the conditions prescribed by the Graduate School for these degrees. It is manifest, however, that theological studies constitute an independent group not formally recognized in the regulations of the Graduate School, and therefore it has seemed desirable that there should be a higher degree in theology corresponding to the Master's degree in Arts which should be under the supervision of the Faculty of Divinity. In accordance with the rules of the Faculty, candidates for this degree must hold the degree of A.B. and be graduates of an approved theological school having a three years' course of study, and the degree is to be granted upon the basis of at least a full year of residence devoted to concentrated study in one of the recognized fields of theological learning in which the candidate's proficiency is to be tested by an examination, partly oral and partly written, at the end of the year.

The change in the requirements for the degree of S.T.B. does away with the old method by which the degree was granted upon the completion of fourteen courses approved by the Faculty to count towards the degree. By the new method, a student, already holding the degree of A.B., or admitted to equivalent standing, must devote three years to theological study and must pass at the end of the third year satisfactory examinations upon the entire field of theological learning and, in addition, upon such portions of it as he has selected for more detailed study. The purpose of the change is to ensure a more thorough and durable training for the work of the ministry and to enhance the value of the degree by increasing the difficulty of obtaining it.

Owing to political disturbances in the East, the Committee of the American Board of Commissioners for Foreign Missions, of which Professor E. C. Moore was a member, deemed it advisable to abandon its contemplated trip for which Professor Moore had been granted leave of absence during the second half-year, and therefore he was able to remain in residence throughout the year, giving courses as hereinafter reported.

The course in Religious Education provided by the generosity of Mr. Horace S. Sears was given during the second half-year by Professor George A. Coe of Union Theological Seminary. Although the course was formally taken by only a few students, since many of those most interested in the subject had attended the course conducted the year before by Professor Holmes, the lectures were well attended and students from other theological seminaries in the vicinity availed themselves of our invitation to visit the meetings of the course without charge. Special gratitude is due to Professor Coe for his kindness in coming to us, and to Union Seminary for its generosity in releasing him for this important service.

In a previous report I recommended the establishment of a three years' cycle of courses covering Church Music, Religious Education, and the Relation of the Minister to Social Problems, to the end that students taking the regular three years' course may receive instruction in all of these subjects during their term of residence. Through an arrangement with the Episcopal Theological School, which opens to our students a course given by Dean Hodges on Christian Liturgies, and the introduction of a Harvard-Andover course on Church Music by Dr. Davison, the first of the three topics mentioned is now satisfactorily covered except in the field of hymnody. It is to be hoped, also, that the course in Religious Education will be offered, at least in alternate years, by Professor Holmes of the Department of Education, who, in most trying circumstances, carried it through two years ago with remarkable success. But the deeply regretted resignation of Professor Peabody increases the need for a course on the Relation of the Minister to Social Problems. Furthermore, Professor Peabody's retirement will leave us with no member of the Faculty devoting himself primarily to the department of Homiletics and Pastoral Care, and the interests of the School imperatively demand that this highly important side of its work shall be materially strengthened. A school aiming to prepare men for the work of the ministry cannot honorably leave instruction bearing

upon the technical and practical part of a minister's life to men whose primary interest necessarily lies in other departments to which they were specifically appointed. Moreover, the fact that many of our students are engaged for a part of their time in service to neighboring churches constitutes a problem which demands for its best solution the presence on the Faculty of a man who can organize these practical activities into a substantial part of the educational work of the School by helpful oversight and direction.

During the past year four students were in residence only during the first half-year, and five entered after the Mid-years. The distribution of the total enrolment was as follows:—

Resident Graduates .....	13
Senior Class .....	4
Middle Class .....	5
Junior Class .....	2
Special Students .....	7
Andover Students .....	22
	—
Total .....	53

Thirty-five colleges were represented as follows:—

Alfred University .....	1	University of Minnesota .....	1
Amherst College .....	5	Nebraska Wesleyan University ..	1
Berea College .....	1	Northwestern University, Ill. ...	2
Brown University .....	3	Ohio Wesleyan University .....	1
Central Turkey College .....	1	Olivet College .....	1
Colgate University .....	1	Ripon College .....	1
Columbia University .....	2	University of Rochester .....	1
Cumberland University .....	1	Southwestern University .....	1
Dartmouth College .....	1	Syracuse University .....	1
University of Denver .....	1	University of Toronto .....	1
DePauw University .....	1	Transylvania University .....	1
Drake University .....	1	Wabash College .....	1
Drury College .....	1	Wesleyan University .....	1
Harvard University .....	12	Western Reserve University ....	2
Howard University .....	1	Yale University .....	1
State Normal School of Kansas .	1		—
Lafayette College .....	1		57
McGill University .....	2	Counted more than once .....	9
Marietta College .....	2		—
University of Michigan .....	1		48

Fourteen theological seminaries were represented by graduates as follows:—

College of the Bible, Ky. ....	1
Boston University .....	4
Drake University .....	1
Episcopal Theological School, Cambridge .....	1
Garrett Biblical Institute .....	1
Harvard University .....	1
Harpoot Theological Seminary, Turkey .....	1
Lutheran Theological Seminary, Philadelphia .....	1
Meadville Theological School .....	1
Newton Theological Institution .....	1
Pacific Theological Seminary .....	1
Presbyterian College, Montreal .....	1
Rochester Theological Seminary .....	1
Tohoku Gakuin, Japan .....	1
	<u>17</u>
Counted more than once .....	1
	<u>16</u>

The interchange of instruction between the Faculty of the School and the Faculty of Arts and Sciences indicates the extent of the contribution made by the Divinity School to the general work of the University. This interchange between the two Faculties in 1911-12 was as follows:—

Divinity students electing courses offered primarily by the Faculty of Arts and Sciences:—

English .....	2 elections.
German .....	3 "
French .....	1 election.
History .....	4 elections.
Government .....	1 election.
Economics .....	4 elections.
Philosophy .....	29 "
Social Ethics .....	2 "
Education .....	3 "
Music .....	1 election.
	<u>50</u>

Non-Divinity students electing courses offered primarily by the Divinity School:—

Old Testament .....	47
Church History .....	125
History of Religions .....	18
Theology .....	56
Social Ethics .....	46
	<u>292</u>

The interchange of instruction between the Harvard Divinity School and Andover Theological Seminary was as follows: —

Harvard Divinity students electing courses offered primarily by Andover Theological Seminary: —

Old Testament .....	5
New Testament .....	7
Church History .....	3
Theology .....	7
Homiletics .....	10
	—
	32

Andover students electing courses offered primarily by the Divinity School: —

Old Testament .....	4
New Testament .....	6
Church History .....	7
History of Religions .....	2
Theology .....	8
Ethics .....	5
Homiletics .....	11
	—
	43

Three members of the School received the degree of S.T.B., four the degree of A.M., and three the degree of Ph.D.

The following is a list of the courses of instruction given in the School in the year 1911-12. With each course is a statement of the number of students electing it from the Divinity School, Andover Theological Seminary, the Graduate School of Arts and Sciences, and Harvard College. In such Andover courses as were taken only by Andover students, no record of attendance is given. A list of the lectures delivered in the Lowell Institute course in King's Chapel is appended to the list of regular courses.

## COURSES OF INSTRUCTION

### OLD TESTAMENT

- 1<sup>st</sup>. Professor JEWETT. — Hebrew. — Morphology. Selections from the prose narratives of the Old Testament. *First half-year*. 3 And., 3 Col.
- 2<sup>d</sup>. Professor LYON. — Hebrew (second course). — Syntax. Extensive reading in the Old Testament. *Second half-year*. 1 And., 4 Col.
18. Professor JEWETT. — Classical Aramaic (Syriac). — Brockelmann's *Syrische Grammatik*; selections from the Peshitto; Syriac prose of the classical period. 1 Div.
4. Professor LYON. — The Old Testament, with special reference to the History and the Literature of Israel. 37 Col.



- A4 <sup>1</sup>/<sub>2</sub>f. Professor ARNOLD. — History of Israel. *Half-course (first half-year)*.  
1 Div., 7 And., 1 Col.
- A5. Professor ARNOLD. — Introduction to the Old Testament. — History of the text; the formation of the Canon; historico-critical study of the origin, form, and contents of the several books. 4 Div., 4 And., 1 Col.
11. Professor LYON. Assyrian (second course). 1 Gr.

## NEW TESTAMENT

- A1 <sup>1</sup>/<sub>2</sub>f. Professor RYDER. Introduction to the New Testament. *Half-course*.  
4 Div., 4 And.
- 2 <sup>1</sup>/<sub>2</sub>f. Professor ROPES. — Introduction to the Study of the New Testament. The Ideas of the New Testament. *Half-course (second half-year)*.  
3 Div., 4 And.
- A3. Professor RYDER. — Interpretation of the Synoptic Gospels.  
1 Div., 6 And.
8. Professor ROPES. — The Epistles of Paul. — Selected portions. 3 Div.
- 15 <sup>1</sup>/<sub>2</sub>f. Professor FENN. — The Theological Method of Jesus and Paul. *Half-course (first half-year)*.  
2 Div., 2 And.
- A17. Professor HINCKS. The Life of Christ. 2 Div., 5 And.

## CHURCH HISTORY

1. Professor EMERTON. — The First Eight Christian Centuries. — The Conflict of Christianity with Paganism. Origin and Development of the Roman Papacy to its alliance with the Frankish State. The Germanic races as the basis of a new Christian civilization.  
4 Div., 6 And., 1 Gr., 7 Col.
- A6. Professor PLATNER. — History of Early Christian Literature.  
1 Div., 1 And.
3. Professor EMERTON. — The Era of the Reformation in Europe, from the rise of Italian Humanism to the close of the Council of Trent (1350-1563).  
2 Div., 1 And., 8 Gr., 11 Col.
- 4a <sup>1</sup>/<sub>2</sub>f. Professor E. C. MOORE. — The History of the Christian Church in Europe from the Reformation to the End of the Eighteenth Century. *Half-course (first half-year)*.  
2 Div., 1 And., 1 Gr., 38 Col.
- 4b <sup>1</sup>/<sub>2</sub>f. Professor E. C. MOORE. — The History of the Christian Church in Europe and of the Expansion of Christendom in the East during the Nineteenth Century. *Half-course (second half-year)*. 5 Div., 56 Col.
- A8 <sup>1</sup>/<sub>2</sub>f. Professor PLATNER. History of Congregationalism. *Half-course (second half-year)*.  
1 Div., 6 And.
- A2. Professor PLATNER. History of Christian Doctrine.  
1 Div., 4 And., 1 Col.
6. Professor EMERTON. Practice in the Study and Use of Materials for Church History. 1 Div., 2 Gr.

## HISTORY OF RELIGIONS

- 1 <sup>1</sup>/<sub>2</sub>f. Professor G. F. MOORE. Origin and Development of Religion. *Half-course (first half-year)*.  
2 Div., 1 And., 1 Gr., 9 Col.
2. Professor G. F. MOORE. — History of Religions in Outline.  
15 Div., 2 And., 8 Col.
20. Professor G. F. MOORE. Research Course. 1 Div., 1 Gr.

## THEOLOGY

- 1 <sup>1</sup>/<sub>2</sub>f. Professor FENN. — Theism. *Half-course (first half-year)*.  
6 Div., 2 And., 2 Gr., 1 Col.
- A1 <sup>1</sup>/<sub>2</sub>f. Professor EVANS. — The Philosophic Basis of the Christian Religion.  
*Half-course (first half-year)*. 2 Div., 6 And.
- 2 <sup>1</sup>/<sub>2</sub>. Professor FENN. — Outlines of Systematic Theology. *Second half-year*.  
1 Div.
- 5 <sup>1</sup>/<sub>2</sub>f. Professor FENN. — The History and Philosophy of Christian Mysticism.  
*Half-course (second half-year)*. 11 Div., 3 And.
- 6 <sup>1</sup>/<sub>2</sub>f. Professor E. C. MOORE. — History of Christian Thought since Kant.  
*Half-course (first half-year)*. 7 Div., 3 And., 3 Col.
- 7a <sup>1</sup>/<sub>2</sub>f. Professor E. C. MOORE. — Philosophy of Religion: The Nature of Religion. — Lectures, reading, and reports. *Half-course (first half-year)*.  
4 Div., 3 Gr., 10 Col.
- 7b <sup>1</sup>/<sub>2</sub>f. Professor E. C. MOORE. — Philosophy of Religion: The Truths of Religion. — Lectures, reading, and reports. *Half-course (second half-year)*.  
2 Div., 2 And., 37 Col.

## ETHICS

1. Professor PEABODY, Dr. FORD, and Dr. FOERSTER. — Social Ethics. — The problems of Poor-Relief, the Family, Temperance, and various phases of the Labor Question, in the light of ethical theory. — Lectures, special researches, and prescribed reading.  
3 Div., 3 And., 3 Gr., 33 Col., 1 Ext.
- A3 <sup>1</sup>/<sub>2</sub>f. Professor EVANS. — Christian Ethics. *Half-course (second half-year)*.  
1 Div., 10 And.
- 20a. Professor PEABODY. — Seminary of Social Ethics. — *Subject for the year*: The History of Social Ethics from Fichte to Tolstoi.  
3 Div., 2 And., 5 Gr., 2 Col., 1 R.
- 20b. Professor PEABODY will direct special researches of competent students in Social Ethics.  
1 Div., 1 Gr.

## HOMILETICS AND PASTORAL CARE

- 1 <sup>1</sup>/<sub>2</sub>f. Professor PEABODY. — An Introduction to Preaching. *Half-course (first half-year)*.  
3 Div.
- A1a <sup>1</sup>/<sub>2</sub>f. Professor FITCH. — The Office of the Ministry: The Historic Ideals and Present Possibilities of the Ministry. *Half-course (second half-year)*.  
3 Div., 10 And.
2. Professors PEABODY, E. C. MOORE, FENN, and FITCH. — Preaching.  
8 Div., 4 And.
- A3a <sup>1</sup>/<sub>2</sub>f. Professor FITCH. — The Homiletical Use of the Old Testament. *Half-course (first half-year)*.  
1 Div., 5 And.
- A3b <sup>1</sup>/<sub>2</sub>f. Professor FITCH. — The Homiletical Presentation of the Teaching of the New Testament. *Half-course (second half-year)*. 6 Div., 7 And.
- 10 <sup>1</sup>/<sub>2</sub>f. Professor COE and Asst. Professor H. W. HOLMES. — Principles and Methods of Religious Education. *Half-course (second half-year)*.  
3 Div.
- 11 <sup>1</sup>/<sub>2</sub>f. Dr. DAVISON. The History and Development of Church Music. *Half-course (second half-year)*.  
7 And.

## PUBLIC SPEAKING

1. Asst. Professor WINTER and Mr. BUNKER. — Training in Voice and Speech. (Not counted for a degree.) 2 Div.

## KING'S CHAPEL LECTURES

## "THE THEOLOGY OF CONTEMPORARY RELIGION"

- A. Professor E. C. MOORE. — Four lectures: "Within the Church."
- B. Professor W. W. FENN. — Four lectures: "Without the Church."

In accordance with our agreement with Andover Theological Seminary, the libraries of the two institutions have been consolidated into the Andover-Harvard Theological Library, and the books in our stack have been transferred to the Andover building. The books on the reserved shelves in our Reading Room remain in place, and the room has been maintained as a working library for students. This arrangement entails considerable expense, both for attendance in the library during working hours, and also for the purchase of duplicates to books already in the Andover-Harvard collection,—an expense which can be justified only if our Reading Room is resorted to by a sufficient number of students. It must be said that during the past year this condition has not been fulfilled, but the experience of a single year does not furnish sufficient basis for judgment. In previous years the use of the Library by students has shown wide fluctuations and it may well be that the experience of last year gives no satisfactory evidence as to the value of the Reading Room to our students. Besides, in existing circumstances, it is exceedingly difficult to maintain the individuality of the School, and to give up our Library altogether would be perilous. During the past year, there were added to the Andover-Harvard Library 969 volumes and 608 pamphlets by purchase, and 1036 volumes and 932 pamphlets by gift, making the total of books in the combined libraries 102,521 and of pamphlets 48,303. Of these additions there are credited to the Harvard Divinity School, by purchase 386 volumes and 299 pamphlets, and by gift 577 volumes and 247 pamphlets, making the total of books owned by the Harvard Divinity School and contained in the Andover-Harvard Library, 39,757, and of pamphlets 11,175.

W. W. FENN, *Dean*.

## THE LAW SCHOOL

TO THE PRESIDENT OF THE UNIVERSITY:—

SIR, — I have the honor to present my report upon the Law School for the academic year 1911-12.

The first table below shows the growth of the School from year to year since 1870 in the number of students, the number and percentages of college graduates, and the number of colleges represented by their graduates.

The falling off in numbers with which the present year opens is not due to a reduction in the number of new students, as there has been no substantial change in the size of the entering class. The difference is in the second and third-year classes, and is largely due to greater stringency in excluding from the School students who have not reached the required standard. The large growth of the School is itself among the reasons which make it important to retain only such students as come up to a high standard of capacity and diligence; for the methods of instruction could not be effectively employed with the present large classes without an excellent quality and spirit among the students all through the class-room. Conditions in this particular are very fortunate.

The falling off in the number of Harvard graduates entering the School for some years past has been marked, although it has been rendered less conspicuous by the greater number of men from other colleges. Whether this decline in the number of graduates taking up law as a profession is merely a temporary and accidental fluctuation, or whether it is due to causes affecting also the other learned professions, has been somewhat discussed of late. But a matter of more concern is the decline which has also shown itself in the quality of the work of Harvard men in the School as compared with the work of men from other colleges. It is not to be supposed that this is due to any inferiority in the students themselves, or in their academic preparation; yet it has been too marked to be easily explained as accidental. I am inclined to think that one cause which has prevented Harvard men from distinguishing themselves when they otherwise would have done so is their attempt not infrequently to combine with

Year	Whole No. of Students	Total of College Graduates	Harvard Graduates	Graduates of other Colleges	Non-Graduates	Per cent of College Graduates	No. of Colleges represented
1870-71	165	77	27	50	88	47	27
1871-72	138	70	34	36	68	51	25
1872-73	117	66	34	32	51	56	25
1873-74	141	86	49	37	55	61	25
1874-75	144	82	63	19	62	57	18
1875-76	173	93	60	33	80	54	25
1876-77	199	116	74	42	83	58	30
1877-78	196	121	80	41	75	62	30
1878-79	169	109	71	38	60	64	24
1879-80	177	118	90	28	59	66	20
1880-81	161	112	82	30	49	70	19
1881-82	161	99	66	33	62	61	22
1882-83	138	93	58	35	45	67	32
1883-84	150	105	75	30	45	70	25
1884-85	156	122	85	37	34	78	31
1885-86	158	122	83	39	36	77	29
1886-87	188	143	88	55	45	76	34
1887-88	225	158	102	56	67	70	32
1888-89	225	158	105	53	67	70	32
1889-90	262	189	122	67	73	72	41
1890-91	285	200	135	65	85	70	33
1891-92	370	257	140	117	113	69	48
1892-93	405	266	132	134	139	66	54
1893-94	367	279	129	150	88	76	56
1894-95	413	310	139	171	108	75	74
1895-96	475	380	171	209	95	80	82
1896-97	490	408	186	222	82	83	82
1897-98	551	490	229	261	61	89	77
1898-99	564	503	212	291	61	89	78
1899-00	613	557	236	321	56	91	67
1900-01	655	605	252	353	50	92	83
1901-02	633	584	247	337	49	92	92
1902-03	644	600	241	359	44	93	94
1903-04	743	695	272	423	48	94	111
1904-05	766	711	286	425	55	93	114
1905-06	727	716	295	421	11	98	118
1906-07	705	696	260	436	9	99	126
1907-08	719	712	276	436	7	99	122
1908-09	690	680	256	424	10	99	121
1909-10	765	759	257	502	6	99	127
1910-11	790	778	240	538	12	98	135
1911-12	809	796	216	580	13	98	145
1912-13*	741	729	182†	547	12‡	98	133

their Law School course serious and exacting teaching work in the College. I cannot but think it unfortunate that this situation should exist. The School course is meant to occupy all the student's working time, and any considerable distraction of his activi-

\* Up to October 30, 1912.

† 16 Harvard Seniors who have completed the full College course, but have not received their diplomas, are reckoned as graduates. Prior to 1905-06 Harvard Seniors were not reckoned as graduates but as non-graduates.

‡ Seven of the twelve non-graduates are graduates of law schools.

ties is a misfortune. If necessity requires him to earn money during his course, the evil may be minimized by undertaking work which is not exacting either in the amount or distribution of the time for which it calls, or in the strain which it puts upon the student's mind or nerves. In all these respects some of the positions which are undertaken in the College seem among the worst. Not only do they make an undue demand upon the student's time, but the quality of the work is even more objectionable. The difficult task of effectively teaching mature pupils tends so to engage the thought of a conscientious man that his own study, carried on at the same time in another field, can hardly fail to become more or less perfunctory and superficial. At least it must lack something of the absorbed and excited interest which marks the work of the best students in the Law School. The fact that men of exceptional ability have been able to do the two things at once without actual failure, or even with apparent success, tempts others to undertake the combined work, and as a result the student loses, even under the most favorable conditions, the best features of his Law School course. He often fails to realize this until after graduation, when the harm has been done. If necessity requires a student to undertake such work he should realize that his true course is to postpone entering the Law School for another year.

The second table gives the courses of study and instruction during the year, the text-books used, the number of weekly exercises in each course, and the number of students who offered themselves for examination in each course at the end of the year. Few changes will be observed, the most important being those which resulted from the absence of Assistant Professor Scott during his service as Dean of the Law School of the University of Iowa. It is fortunate for the School that this absence has not continued beyond the year.

At Commencement the degree of Doctor of Law was conferred for the first time upon a graduate student. This marks the beginning of an interesting stage in the development of the School. It is not to be expected that the course for this degree will be pursued by a great number of students; but for men of exceptional quality who are proposing to devote themselves to scientific or scholarly work, either in teaching or in grappling with problems of legislation or administration, the opportunities which it offers are large. And this seems particularly true at a time when a new period of liberalization in our legal system brings the stu-

Instructors	Studies and Text-books	Exercises per week	Number of students examined
<b>First Year</b>			
Prof. Wambaugh and } Mr. Joseph Warren }	Agency. Wambaugh's Cases on Agency . . . . .	2	289
Mr. Seavey . . . . .	Civil Procedure at Common Law. Ames's Cases on Pleading (2d ed.) . . . .	2	292
Prof. Williston } Prof. Wymann }	Contracts. Williston's Cases on Contracts . . . . .	3	289
Prof. Beale . . . . .	Criminal Law and Procedure. Beale's Cases on Criminal Law (3d ed.) . . .	2	289
Prof. Warren . . . . .	Property. Gray's Cases on Property, vols. 1, 2 (3d ed.) . . . . .	2	316
Prof. Thayer . . . . .	Torts. Cases on Torts: Ames, vol. 1 (3d ed.), Smith, vol. 2 (3d ed.) . . . .	2	298
<b>Second Year</b>			
Prof. Brannan . . . . .	Bills of Exchange and Promissory Notes. Ames's Cases on Bills and Notes and Brannan's Negotiable Instruments Law . . . . .	2	194
Prof. Thayer . . . . .	Evidence. Thayer's Cases on Evidence (2d ed.) . . . . .	2	235
Prof. Pound . . . . .	Jurisdiction and Procedure in Equity. Ames's Cases in Equity Jurisdiction, vol. 1 . . . . .	2	246
Prof. Gray and Mr. Gray . .	Property. Gray's Cases on Property, vols. 3, 4 (2d ed.) . . . . .	2	234
Prof. Wymann . . . . .	Public Service Companies. Beale's Cases on Carriers (3d ed.). Wymann's Cases on Public Service Companies (2d ed.) . . . . .	2	215
Prof. Williston . . . . .	Sales of Personal Property. Williston's Cases on Sales . . . . .	2	238
Prof. Wambaugh . . . . .	Insurance. Wambaugh's Cases on Insurance . . . . .	2	71
Prof. Brannan . . . . .	Damages. Beale's Cases on Damages (2d ed.) . . . . .	1	32
Mr. Joseph Warren . . . . .	Persons. Smith's Cases on Persons . . . . .	1	38

## Third Year

Prof. Beale . . . . .	Conflict of Laws. Beale's Cases on the Conflict of Laws . . . . .	2	214
Prof. Wambaugh . . . . .	Constitutional Law. Thayer's Cases on Constitutional Law . . . . .	2	160
Prof. Warren . . . . .	Corporations. Warren's Cases on Private Corporations . . . . .	2	286
Prof. Brannan . . . . .	Partnership. Ames's Cases on Partnership . . . . .	2	80
Prof. Gray . . . . .	Property. Gray's Cases on Property, vols. 5, 6 (2d ed.) . . . . .	2	75
Prof. Wyman . . . . .	Suretyship and Mortgage. Ames's Cases on Suretyship. Wyman's Cases on Mortgage (revised ed.) . . . . .	2	172
Prof. Pound . . . . .	Trusts. Ames's Cases on Trusts (2d ed.) . . . . .	2	203
Prof. Brannan . . . . .	Bills of Exchange and Promissory Notes. Ames's Cases on Bills and Notes and Brannan's Negotiable Instruments Law . . . . .	2	23
Prof. Thayer . . . . .	Evidence. Thayer's Cases on Evidence . . . . .	2	4
Prof. Pound . . . . .	Jurisdiction and Procedure in Equity. Ames's Cases in Equity Jurisdiction, vol. 1 . . . . .	2	3
Prof. Gray and Mr. Gray . . . . .	Property II. Gray's Cases on Property, vols. 3, 4 (2d ed.) . . . . .	2	3
Prof. Williston . . . . .	Sales of Personal Property. Williston's Cases on Sales . . . . .	2	3
Prof. Williston . . . . .	Bankruptcy. Williston's Cases on Bankruptcy . . . . .	1	74
Prof. Brannan . . . . .	Damages. Beale's Cases on Damages . . . . .	1	14
Mr. Dutch . . . . .	Equity III. Ames's Cases in Equity Jurisdiction, vol. 2 . . . . .	1	32
Prof. Wambaugh . . . . .	Insurance. Wambaugh's Cases on Insurance . . . . .	1	11
Prof. Beale . . . . .	Municipal Corporations. Beale's Cases on Municipal Corporations . . . . .	1	47
Prof. Wyman . . . . .	Public Service Companies. Beale's Cases on Carriers (2d ed.). Wyman's Cases on Public Service Companies (2d ed.) . . . . .	2	13
Mr. Joseph Warren . . . . .	Persons. Smith's Cases on Persons . . . . .	1	20
Mr. Schaub . . . . .	Quasi-Contracts. Scott's Cases on Quasi-Contracts . . . . .	1	14
Graduate Courses			
Mr. Dutch . . . . .	Admiralty. Ames's Cases on Admiralty . . . . .	1	1
Prof. Wambaugh . . . . .	International Law. Scott's Cases on International Law . . . . .	1	1
Prof. Beale . . . . .	Jurisprudence. No text-book . . . . .	1	2
Prof. Pound . . . . .	Roman Law. No text-book . . . . .	2	2
Prof. Pound . . . . .	Theory of Law. No text-book . . . . .	1	
Prof. Wambaugh . . . . .	Introduction to the Year Books. No text-book. (No examination) . . . . .		



dent face to face with fundamental questions of the nature and possibilities of law.

The Research Scholarship referred to in the last report brought about work which it is believed will reflect credit upon the holder of the Scholarship and upon the School. The givers of the Scholarship have generously continued it for another year.

An event of signal importance has been the purchase of the library of the Marquis de Olivart. This great library contains nearly seven thousand titles (about twice as many volumes). Its completeness is indicated by the circumstance that the catalogue of this library is the standard bibliography of international law, referred to as such in recent treatises on the subject, for instance, Olivi, *Manuale di diritto internazionale* (1902), page 44; Bonfils, *Manuel de droit international public*, 4 ed. (1905), 147; the German edition of Bonfils, page 62; Hershey, *Essentials of International Public Law* (1912), 90. In the bibliography annexed to the article on the history of the law of nations in the *Cambridge Modern History*, volume 12, chapter 22, Sir Frederick Pollock says (page 954): "A list of such books would be out of place here but we may refer to the Marquis de Olivart's *Bibliographie du droit international*, Paris, 1905 and 1907 . . . this purports to note only works in the author's own library, but we know of nothing approaching it in completeness." The library is particularly rich in original documents, including some cases of importance of which it contains the single known copy, a full collection of documents and pamphlets relating to the international relations of Central and South American countries and the Spanish-American War of 1898, and also very full collections of documents and pamphlets relating to all recent international controversies. In addition there is a full collection of sixteenth, seventeenth, and eighteenth century writers on jurisprudence and public law, including some editions which are generally listed as unprocurable. Owing to a fortunate combination of circumstances, the School was able to obtain the library on very favorable terms, and the surplus accumulated in recent years justified the purchase.

More than 6,000 volumes were also added to the library as a result of our Assistant Librarian's trip abroad in the summer of 1911.

Largely as a result of these purchases 21,447 volumes and 3,594 pamphlets were added to the library during the period of eleven months from August 1, 1911, to June 30, 1912. On July 1, 1912, the library contained 148,337 volumes and about 17,570 pam-

phlets. From July 1, 1870, to July 1, 1912, the library has grown to be fifteen times as large as it was in the earlier year.

Among other important additions to the library during the year were a rare edition of Littleton's *Tenures*, published in 1540; early Upper Canada annual statutes and the earliest ordinances of the province of Quebec; a complete collection of the annual laws and decisions of Brazil; a volume of Choctaw Laws, the only known copy; the earliest laws of Kentucky and Mississippi; a very rare and valuable collection of Delaware laws, containing the revision of the laws from 1752 to 1762, and the annual session laws from 1763 to 1774; and several sessions of rare Oregon laws.

Thirty-three engraved portraits of judges and lawyers, three photographs, one lithograph and eleven prints of buildings, courtroom interiors and trial scenes, have been added to the collection during the year.

The competition between second-year law clubs established from the income of Dean Ames's gift to the School took place for the first time during the year and was a great success. More than twenty clubs took part in the competition. It aroused keen interest among the students, and the quality of the work done, both in argument and preparation of briefs, was very good. The competition has also stimulated the work of the first-year courts, and the rule that clubs shall not be eligible for the competition in future years unless they have complied with the regulations prescribed by the Board of Advisers in their first-year work has had a good effect. In this and other respects the Advisers, with the experience of the past two years to guide them in developing and systematizing their action, have been able to give much help to the first-year men.

EZRA RIPLEY THAYER, *Dean.*

## THE FACULTY OF MEDICINE

TO THE PRESIDENT OF THE UNIVERSITY:—

SIR, — As Dean of the Faculty of Medicine I have the honor to present my report for the academic year 1911-12.

The current year has been one of much activity in both the Medical School and the Dental School. In the Dental School there has been a very gratifying increase in the number of students following the opening of the new buildings. An account of the activities of these two Schools will be found in the report of the Dean of the Medical School and that of the Dean of the Dental School.

The organization of a Graduate School of Medicine, referred to in the last report, was completed during the current year by the appointment of a Dean, Dr. Horace D. Arnold; a Secretary, and an Administrative Board.

The Collis P. Huntington Memorial Hospital under the direction of the Cancer Commission of Harvard University was completed and opened for patients during the year. Much construction work was done on the Peter Bent Brigham, the Infants' and the Children's Hospitals, on grounds adjacent to the Medical School.

The Faculty of Medicine lost during the year the services of an unusually large number of teachers. Professor F. C. Shattuck, Professor James J. Putnam, Professor Edward H. Bradford, and Professor John T. Bowen resigned from their Chairs, the first three under age retirement rules governing terms of service at hospitals. Professor Maurice H. Richardson died suddenly during the summer. These men had rendered conspicuous service to the cause of medical education during their connection with the Harvard Medical School.

The present Dean received leave of absence beginning May 1st, in order to visit and study hospitals and laboratories abroad in the interest of the Peter Bent Brigham Hospital, and tendered his resignation, to take effect at the end of the year, in order to undertake work in connection with that Hospital. As his successor was appointed Dr. Edward H. Bradford, Professor *Emeritus* of Orthopedic Surgery.

In February and June ninety-two men were recommended to the President and Fellows for degrees:—

Medical School	{	For the degree of M.D. (February) . . . .	8
		“ “ “ <i>cum laude</i> (February) . . . .	1
		“ “ “ (June) . . . . .	32
		“ “ “ <i>cum laude</i> (June) . . . . .	20
		“ “ Dr.P.H. (June) . . . . .	3
			<u>64</u>
Dental School	{	For the degree of D.M.D. (February) . . . .	4
		“ “ “ (June) . . . . .	24
		“ “ “ <i>cum laude</i> (June) . . . . .	0
			<u>28</u>
Total . . . . .			92

HENRY A. CHRISTIAN, *Dean.*

## THE MEDICAL SCHOOL

TO THE PRESIDENT OF THE UNIVERSITY:—

SIR,—As Dean of the Medical School, I have the honor of presenting my report for the academic year 1911-12.

The Administrative Board was constituted as follows: Drs. H. A. Christian, C. M. Green, F. B. Harrington, G. G. Sears, F. B. Mallory, W. B. Cannon, John Warren, and E. E. Southard.

The Faculty Council was composed of the following: Drs. H. A. Christian, W. T. Councilman, G. G. Sears, John Warren, J. B. Blake, Abner Post, Otto Folin, and the President of the University.

During the year an important change was made in the method of instruction in the Harvard Medical School. For a long period of years it had been customary in the Medical School to hold an examination at the end of each individual course. As the result of the investigations of a Committee of the Faculty, and much discussion within the Faculty, it was decided to change from this plan to a plan which involved holding two general examinations, one after two years of medical study, and one after the close of a student's curriculum. These general examinations are to be conducted so as to measure the student's comprehension, judgment, and skill rather than to test chiefly his detailed information. They are to cover the subjects now taught in the first and second years of the medical curriculum in the case of the first general examination, and the subjects in the third and fourth years of the medical curriculum in the case of the second general examination. The examinations are to be held under the direction of a Committee and are to be in part oral, in part written. In addition there are to be practical tests held at the end of each course. The student's final mark will be based in part upon his practical tests, in part upon his general examinations. It is believed that this new plan of examinations will serve to stimulate the students to take a broader view of the subjects of medicine, to correlate more completely than was done in the past the component parts of their curriculum, and to serve as a far better test of the student's ability to meet the requirements of his profession after he leaves the Medical School. Information in regard to the details of this

plan of general examinations will be found in the Annual Catalogue of the Medical School.

An examination of the Treasurer's Report for the current year will show that the many undertakings of the Medical School require the expenditure of a large sum of money. Though the School lived within its means during the year 1911-12, the present resources of the Medical School are completely used up in its various activities, and there is no money available for further development of these undertakings or for expansion, until additional funds are provided. Such funds are particularly needed for a more extended development of the clinical departments in order that the clinical departments may utilize in the very best way the clinical facilities made available by the construction of new hospitals and the reorganization of old hospitals. Other departments in the Medical School could be expanded very advantageously, were there money available. Money given now to the Harvard Medical School could be used almost entirely for the employment of teachers and investigators and for special apparatus for such investigations, inasmuch as an ample plant exists, and a large return could be expected from such new funds in the way of productive research. Particularly useful are funds for unrestricted use or whose use is restricted within broad limits, so that the ever changing problems of medical instruction and medical investigation may be met. Generous benefactors each year attest their faith in the work of the Medical School by gifts, and this year was no exception, as \$301,619.30 was received, of which \$119,988.35 was for immediate use, and \$181,630.95 was for capital. Of this sum \$149,891.24 was given for the work of the Cancer Commission of Harvard University; \$151,728.06 for various uses in the Medical School, including an addition of \$28,500 to the Rebecca A. Greene fund for unrestricted use mentioned in the last report, and the Julia A. Moseley bequest of \$74,285.71 for two travelling fellowships to be awarded to students of the School. The Faculty of Medicine recognizes clearly its great responsibility in administering such large funds, but feels confident that the work being done in the various departments, much of which is referred to in this report, justifies the confidence shown in the past by benefactors. Large resources, with wise coöperation on the part of Boston hospitals, have made possible a plant capable of using intelligently and effectively yet larger resources.

A somewhat detailed report of Departments follows.

*Buildings and Grounds.* — Needed repair work has been done, and minor changes have been made in the various buildings.

*Anatomy.* — The Departments of Anatomy and Comparative Anatomy have been combined into a single Department, under which is conducted the instruction in gross anatomy, histology, embryology, and comparative anatomy. During this year for the first time Medical students were separated from Dental students in their instruction in gross anatomy. Inasmuch as the requirements of each are slightly different, the plan has been advantageous to both groups of students. For the benefit of Dental students, most of whom enter the School without previous training in biology, a special course in the anatomy of the cat was arranged under the direction of Dr. Williams, with the assistance of Dr. Johnson and Mr. Heuser, to serve as an introduction to the study of human anatomy and physiology. During the year the work for nine papers, on the anatomy of the guinea-pig, the development of mammalian blood and blood vessels, and the embryology of the digestive tract, was completed, and other studies are in progress. Professor Mangum of the University of North Carolina, Dr. Berstein of the Bender Laboratory of Albany, New York, and Professor Kingsbury of Cornell University visited the laboratory during the year and made use of its resources; Mr. Heuser received leave of absence during part of the year to serve as Assistant Professor of Zoölogy in the University of Kansas. Dr. Begg resigned as Teaching Fellow to serve as Professor of Histology in Drake University. Dr. Johnson resigned as Instructor to become Assistant Professor of Anatomy in the University of Missouri.

*Physiology.* — Professor Cannon has collated the results of his investigations on the movements of the alimentary canal, and they have been published in a series of International Medical Monographs. With Dr. Nice he has been studying the influence of emotional states on muscular efficiency. He has also served on a National Commission for Resuscitation from Electrical Shock. Assistant Professor Martin has completed his standardization of electrical stimulation and has collected in book form the various papers which he has published on the subject. His methods have been applied not only to the examination of the sensitiveness of isolated tissues, but of human beings. Mr. Grabfield has investigated the diurnal variations in the sensitiveness of men and women, and in both the Carnegie Nutrition Laboratory and the new Psychopathic Hospital the methods

have been found useful in determining the status of the nervous system under abnormal conditions. Dr. Nice has made observations on the effects of various drugs on the spontaneous movement of mice, and Mr. Porter has continued his investigations on the effects of various agencies on the irritability of the nervous system. The effect of anaemia on the nerve plexus in the wall of the alimentary canal has been studied by Mr. Burket.

*Biological Chemistry.* — For the past three years the researches of this Department have been largely devoted to the discovery of more suitable analytical methods than have hitherto been available for the analysis of urine, blood, and tissues. These methods were published during the year just closed. By the help of these analytical methods, it became possible (for the first time) to follow experimentally the absorption and distribution through the blood and tissues of the digestion products of protein. Some noteworthy results were obtained in this field and have already been published. Dr. Kendall and Mr. Farmer have applied the methods to the study of bacterial metabolism. Taken altogether, the year was a most successful one from the standpoint of research.

*Bacteriology.* — Much of the material gathered by Assistant Professor Wolbach during the expedition to the Gambia, in association with Professor Todd of McGill University, Montreal, was worked up during the year, and a number of papers published under their joint authorship. Experimental work on trypanosomes was conducted by Assistant Professor Wolbach in conjunction with Messrs. Binger and Stevens, students in the Medical School. During the summer of 1912 Assistant Professor Wolbach began a study of the etiology of scarlet fever by means of experimental inoculations in monkeys. Dr. Floyd and Dr. Stanwood investigated the immunizing properties of certain acid-fast bacilli for the tubercle bacillus, and Dr. Floyd, in conjunction with Miss Dunbar, has been studying variations in virulence of tubercle bacilli isolated from the sputum. Dr. Langdon Frothingham has continued his studies of rabies, and in conjunction with Dr. O'Toole has been making a comparative study of anthrax bacilli. In addition they have conducted field work in the study of hog cholera and its management by the use of anti-hog-cholera serum. Dr. Page has completed work on the fermentative properties of bacteria for certain sugars, and other members of the Department have been active in investigation. Dr. Cobb and Dr. Nagel have completed several papers bearing upon the bacteriology of the nose and throat. In connection with the work of the Massa-



chusetts State Board of Health, Dr. Spooner has been given a place in the laboratory for the preparation of anti-typhoid vaccine. The teaching work of the Department has been slightly changed by the introduction into the course for second-year students of a series of demonstrations illustrating some of the immunity reactions of animals to bacteria.

*Pathology.* — The method of instruction of the undergraduate in the course of pathology has been expanded in the past year. In the place of a general didactic course, there was substituted a study of individual cases of disease, and this was facilitated by the preparation by Professor Councilman of a teaching manual of pathology for the students' use. In addition there was added a course in experimental pathology under the direction of Assistant Professor Karsner. The expense of this course was met by a generous gift from Dr. J. C. Phillips. This course has proven a valuable addition to the general course in that it shows the effect produced by the lesions of disease and serves as a stimulus to the students. A beautiful memorial tablet was placed in the Laboratory by the family of Dr. W. R. Brinckerhoff, and the sum of \$5000 was given by them to the Department for the investigation of disease. Dr. Barkan resigned as Instructor to enter upon the study of ophthalmology. Dr. Boretti resigned as Assistant to accept a position as Assistant Professor of Pathology in Northwestern University. During the year 322 post-mortem examinations were made, and 1,025 specimens reported upon by the Pathological Department.

*Comparative Pathology.* — During the year the activities of the Department were somewhat reduced owing to the absence of Professor Smith, who left early in December to serve as Harvard Exchange Professor at the University of Berlin, where he was associated in teaching and research with Professor Flügge, Director of the Hygienic Institute. Dr. Fabyan concluded important work on infectious abortion in cattle, and the work of tracing possible sources of infection of poliomyelitis among the lower domestic animals was continued by Mr. Ten Broeck.

*Preventive Medicine and Hygiene.* — Nine students entered for the work leading to the degree of Doctor of Public Health. The degree was awarded at the end of the year to Dr. H. L. Amoss, who presented a thesis on "A Chemical Study upon Organic Matters in the Expired Breath"; Dr. W. G. Anderson, with a thesis on "Heat, Moisture and Carbon Dioxid considered as Fatigue Factors in their Relation to Health"; Dr. E. H. Schorer,

with a thesis on "Experimental Studies of Milk, with Special Reference to the Uniformity of Different Grades of Milk and the Effects of Storage upon Certified, Inspected, and Pasteurized Milk." Dr. Allen continued his study of diabetes and glycosuria; Dr. Kendall, with Mr. Farmer, their studies on bacterial metabolism; Dr. Sheppard, his investigations of infantile paralysis, carried on under the auspices of the Massachusetts State Board of Health. Professor Rosenau is engaged on investigations of the mode of transmission of infantile paralysis, the presence of the virus of this disease in the secretion from the nose and throat, pasteurization of milk, and a study of organic matter in the expired air. One of the rooms in the Department is being utilized by officers of the United States Navy in studies of the purity of the air in sub-marine boats. Members of the Department have taken an active part in the work of various agencies not directly connected with the Medical School which have a philanthropic and public motive.

*Theory and Practice of Physic.*—Studies of experimental nephritis have been conducted by Professor Christian and Dr. O'Hare; experimental pancreatic lesions in relation to metabolic changes, by Drs. Pratt and Spooner, and experimental arteriosclerosis by Dr. C. Frothingham, Jr. During the latter part of the year Professor Christian and Dr. Frothingham were abroad studying foreign medical clinics in the interests of the Peter Bent Brigham Hospital.

*Clinical Medicine.*—The most important changes in this Department concern themselves with the reorganization of the medical service at the Massachusetts General Hospital, under which it was possible to call Dr. David L. Edsall to Boston as the successor of Professor Shattuck. Under the new organization, Dr. Edsall becomes Chief of Service in one medical service at the Massachusetts General Hospital, with Dr. Cabot as colleague and Chief of Service in the other medical service. Dr. Henry Jackson, after many years of faithful and conspicuous service in the instruction of the Department, resigned. The value to the Department of the Henry P. Walcott Fellowship is great. The work of Dr. Lawrence, its first incumbent, has been published, and the present incumbent, Dr. Palmer, is carrying out investigations upon nephritis.

*Pediatrics.*—The extended facilities for clinical teaching in pediatrics referred to in the last Annual Report have been taken advantage of effectively, and the interest in pediatrics among

the students has been much enhanced by these added facilities. The Department has been enlarged by the addition of three assistants.

*Surgery.* — An important and material change in the work of the Department was the division of fourth-year elective work into separate elective courses. This was done in order to give greater latitude to the student in selecting the particular kinds of surgical work which would be most helpful to him in later years. The laboratory of surgical research was under the immediate charge of Dr. John Homans. Dr. Homans completed his metabolic investigations on the hypophysectomized dog in collaboration with Dr. Benedict of the Carnegie Nutrition Laboratory. Drs. Osgood, Lucas, and Low continued their study of anterior poliomyelitis, and Drs. Risley and Irving studied experimentally produced jaundice in dogs, and the therapeutic relation of transfusion to this condition.

*Obstetrics and Gynaecology.* — In the last Annual Report the very large amount of clinical material available to the Medical School for the teaching of obstetrics was referred to. In the class receiving the M.D. degree in 1912, only one man was satisfied to have a minimum requirement of six obstetric cases, while one student attended 53 cases. The average number of cases personally attended by the class was 25; this in addition to the cases observed under the care of other students and members of the hospital staff. Under the plan referred to last year, through the generosity of the Harvard Medical Alumni Association, an Alumni Assistant was provided for the Department, and Dr. Toppan, who held this position, conducted instruction in addition to that previously furnished by the regular teaching staff. In Gynaecology the School is likewise richly provided with clinical material. The courses in both subjects have remained essentially unchanged from that of the preceding year. Dr. Leo V. Friedman resigned as Assistant in Obstetrics at the close of the year, after eleven years of faithful and efficient service.

*Warren Anatomical Museum.* — Many valuable specimens were added to the Museum during the year. Particularly should be mentioned those prepared by Dr. Leonard W. Williams, whose recent sudden death was such a sad shock to the School. Dr. Williams was an excellent preparer, and his assistance will be greatly missed in the Museum. Two additional marble busts, those of Professor John Ware and Professor Henry P. Bowditch, were placed in the Museum during the year.

*The Proctor Fund for the Study of Chronic Disease.*—This fund, which has served so important a purpose in the past in the investigation of disease, shows an increasing usefulness. Each year the requests for assistance from the fund increase, as does also the value of the work done under its assistance. In the year 1911-12, grants were made to Dr. Pratt, for studies of the pathology of the pancreas; to Drs. Lucas and Osgood, for investigations on the occurrence of the virus of poliomyelitis in the tissues of the tonsils and pharynx; to Dr. O'Hare, for studies of experimental nephritis; to Dr. Ghoreyeb, for the hydro-dynamic study of organs under pathological conditions; and to Dr. Allen, for studies on diabetes.

*Cancer Commission of Harvard University.*—On March 26th of this year the Collis P. Huntington Memorial Hospital was formally opened. Since that time somewhat over 100 patients have been cared for, and investigations for which the Hospital was planned are now in progress. The organization of the Hospital in its dual relation to the treatment of patients and the investigation of cancer has been perfected, and its activities have been coördinated with those of the laboratory in which, up to this time, the work of the Cancer Commission has been conducted. New fields of investigation have been opened to the workers of this Commission by means of the Hospital, and former lines of investigation have been continued.

*Scholarships and Student Aid.*—In connection with the award of scholarships and in aiding deserving students, Dr. Dexter, Director of Scholarships, interviewed 99 Medical students, many of them a number of times. In addition to scholarship awards twenty students were aided by loans or gifts amounting to \$1,296.75. This work, to which Dr. Dexter gives much time, is of great helpfulness to our students and deserves the encouragement of gifts for its enlargement.

## FINAL EXAMINATIONS

	1908			1909			1910			1911			1912		
	Passed	Failed	% Failed	Passed	Failed	% Failed	Passed	Failed	% Failed	Passed	Failed	% Failed	Passed	Failed	% Failed
<b>FIRST CLASS:—</b>															
Comparative Anatomy . . . . .	79	7	86	51	3	54	54	3	57	6	59	8	73	3	76
Biological Chemistry . . . . .	64	15	79	47	17	64	26	58	63	9	48	11	76	3	79
Anatomy . . . . .	65	16	81	54	9	63	14	62	64	3	61	6	70	7	77
Physiology . . . . .	77	16	93	56	13	69	18	54	66	22	66	6	74	5	79
<b>SECOND CLASS:—</b>															
Pathological Anatomy . . . . .	66	13	79	84	12	96	12	50	53	6	56	3	64	4	68
Bacteriology . . . . .	63	22	84	31	12	93	12	53	55	4	59	4	61	5	66
Hygiene . . . . .	73	5	78	87	3	90	3	48	51	6	58	0	64	0	64
<b>THIRD CLASS:—</b>															
Theory and Practice . . . . .	60	6	66	60	7	67	10	96	3	98	3	3	60	6	66
Surgery . . . . .	62	3	65	68	1	69	1	90	0	90	0	0	43	1	44
Obstetrics . . . . .	58	9	67	69	16	85	19	84	9	93	10	3	64	1	65
Pediatrics . . . . .	67	0	67	0	75	0	89	3	92	3	51	2	64	1	65
Dermatology . . . . .	61	8	69	70	7	77	9	93	2	95	2	53	4	62	1
Gynaecology . . . . .	57	10	67	72	5	77	6	75	19	94	25	54	65	1	66
Neurology . . . . .	66	4	70	6	74	2	76	2	87	6	93	7	64	3	67
Therapeutics . . . . .	59	13	72	68	14	82	17	84	10	94	12	51	7	63	7
Clinical Medicine . . . . .	63	7	70	75	5	80	6	89	3	92	3	56	0	62	3
Clinical Surgery . . . . .	61	0	61	0	73	0	73	0	90	0	54	0	64	1	65
Syphilis . . . . .	64	4	68	6	78	0	78	0	87	4	52	2	65	0	65
Ophthalmology . . . . .	59	7	66	10	69	11	80	14	91	5	49	3	61	1	62
Otology . . . . .	64	3	67	5	74	0	74	0	93	1	53	0	64	1	65
Laryngology . . . . .	66	2	68	3	72	1	73	1	90	2	53	0	66	0	66
Psychiatry . . . . .	65	3	68	4	73	2	75	2	91	0	53	0	65	0	65

FOURTH CLASS.—ELECTIVES :<sup>a</sup>—

Anatomy . . . . .	49	0	49	0	38	1	84	3	30	1	31	1	38	0	38	0	38	0	38	0
Comparative Anatomy . . . . .	3	0	3	0	3	0	3	0	4	0	4	0	3	0	3	0	3	0	3	0
Embryology . . . . .	10	0	10	0	2	0	2	0	3	0	0	0	3	0	3	0	2	0	2	0
Physiology . . . . .	2	0	2	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
Comparative Physiology . . . . .	5	0	5	0	1	0	1	0	2	0	2	0	2	0	2	0	3	0	3	0
Biochemistry . . . . .	14	0	14	0	30	0	30	0	32	0	32	0	42	0	42	0	19	0	19	0
Bacteriology . . . . .	2	0	2	0	3	0	3	0	2	0	2	0	5	0	5	0	9	0	9	0
Pathology . . . . .	1	0	1	0	1	0	1	0	4	0	4	0	8	0	8	0	2	0	2	0
Comparative Pathology . . . . .	88	1	84	3	30	1	84	3	30	1	31	1	38	0	38	0	38	0	38	0
Protozoology . . . . .	1	0	1	0	1	0	1	0	9	0	9	0	5	0	5	0	1	0	1	0
Neuropathology . . . . .	88	1	84	3	30	1	84	3	30	1	31	1	38	0	38	0	38	0	38	0
Preventive Medicine and Hygiene . . . . .	45	0	45	0	46	0	46	0	59	0	59	0	63	0	63	0	16	0	16	0
Pharmacology . . . . .	70	0	70	0	47	0	47	0	72	0	72	0	93	0	93	0	59	0	59	0
Medicine . . . . .	2	0	2	0	0	0	0	0	1	0	1	0	3	0	3	0	0	0	0	0
Theory and Practice . . . . .	102	0	102	0	58	1	59	2	94	0	94	0	95	0	95	0	141	0	141	0
Pediatrics . . . . .	19	0	19	0	21	0	21	0	17	0	17	0	23	0	23	0	28	0	28	0
Clinical Surgical Pathology . . . . .	58	0	58	0	50	1	51	2	58	0	58	0	72	0	72	0	40	0	40	0
Röntgen Ray . . . . .	25	0	25	0	24	0	24	0	24	0	24	0	40	0	40	0	17	0	17	0
Surgery . . . . .	3	0	3	0	8	0	8	0	1	0	1	0	17	0	17	0	16	0	16	0
Genito-Urinary Surgery . . . . .	28	0	28	0	11	0	11	0	22	0	22	0	14	0	14	0	16	0	16	0
Orthopedics . . . . .	9	0	9	0	1	0	1	0	3	0	3	0	5	0	5	0	4	0	4	0
Surgical Pathology . . . . .	7	0	7	0	2	0	2	0	2	0	2	0	7	0	7	0	21	0	21	0
Obstetrics . . . . .	16	0	16	0	11	0	11	0	13	0	13	0	21	0	21	0	28	0	28	0
Gynaecology . . . . .	16	0	16	0	11	0	11	0	13	0	13	0	21	0	21	0	28	0	28	0
Dermatology and Syphilis . . . . .	28	0	28	0	11	0	11	0	22	0	22	0	14	0	14	0	16	0	16	0
Neurology and Psychiatry . . . . .	9	0	9	0	1	0	1	0	3	0	3	0	5	0	5	0	4	0	4	0
Ophthalmology . . . . .	7	0	7	0	2	0	2	0	2	0	2	0	7	0	7	0	21	0	21	0
Otology . . . . .	16	0	16	0	11	0	11	0	13	0	13	0	21	0	21	0	28	0	28	0
Laryngology . . . . .	16	0	16	0	11	0	11	0	13	0	13	0	21	0	21	0	28	0	28	0

<sup>a</sup> In the table of electives, not the total number of students taking electives are enumerated, but the number of courses elected. Each course represents the work of one student for a period of one month. Eight electives constitute the work of the fourth year, but a student may take more than one month's work in a single subject. This system of fourth-year work went into effect in 1906.

## GENERAL STATISTICS OF THE SCHOOL

*Candidates for the Degree of Doctor of Medicine*

New matriculants . . . . . 90

The number of students in attendance:—

Fourth Class . . . . . 50

Third Class . . . . . 56

Second Class . . . . . 57

First Class . . . . . 95

Special Students . . . . . 12

Total . . . . . 270

Applicants for Degree of M.D. (February) . . . . . 9

Applicants for Degree of M.D. (June) . . . . . 54

63

Rejected . . . . . 2

Graduated . . . . . 61

Of the 61 students who received the degree of Doctor of Medicine, 21 received the degree *cum laude*.

*Candidates for the Degree of Doctor of Public Health*

The number of students in attendance . . . . . 5

Applicants for Degree of Dr.P.H. (June) . . . . . 4

Rejected . . . . . 1

Graduated . . . . . 3

	SUMMER COURSES					GRADUATE COURSES				
	1908	1909	1910	1911	1912	1907-08	1908-09	1909-10	1910-11	1911-12
Courses taken	178	291	299	510	485	125	123	151	184	222
Students . .	186	210	197	267	219	61	111	111	158	155
Receipts . .	\$4886.50	\$8729.50	\$8622	\$13370	\$11634.50	\$2932.50	\$3187	\$3606.77	\$4084	\$5077

Students in courses of the regular medical curriculum . . . 270

Students in Graduate Medical courses . . . . . 219

Students in Summer Medical courses . . . . . 155

Students in Doctor of Public Health courses . . . . . 5

Total students, October 1, 1911, to October 1, 1912, . . 649

HENRY A. CHRISTIAN, *Dean*.

## THE DENTAL SCHOOL

**TO THE PRESIDENT OF THE UNIVERSITY:—**

SIR, — I have the honor to submit my report on the Dental School for the academic year 1911-12.

The total number of students registered was 154, an increase of 38 over the registration of last year.

The registration by classes was as follows:—

Third-year students . . . . .	42
Second-year students . . . . .	55
First-year students . . . . .	57
	154

Instruction was given as follows:—

**Anatomy.**—Asst. Professor WARREN, Demonstrator CHEREVER, Instructors MOSHER, R. M. GREEN, and SHEPARD, Assistants HARTWELL, BOOTHBY, EHRENFRIED, WHITTEMORE, and YOUNG, Fellow ADAMS. 424 hours.

**Comparative Anatomy.**—Professor MINOT, Asst. Professor LEWIS, Demonstrator BREMER, Instructors WILLIAMS, SHEPARD, JOHNSON, Teaching Fellow BEGG, Austin Teaching Fellow HEUSER. 252 hours.

**Physiology.**—Professor CANNON, Asst. Professor MARTIN, Instructor NICH, Teaching Fellows BURKET, MYERS, Austin Teaching Fellow PORTER. 348 hours.

**Physiological and Dental Chemistry.**—Lecturer H. CARLTON SMITH, Assistant FRED M. RICE. 302 hours.

**Bacteriology.**—Professor H. C. ERNST, Asst. Professor WOLBACH, Instructors FROTHINGHAM, PAGE, Assistants PERRY, WORTHINGTON, EVERETT, DANE, STANWOOD, Austin Teaching Fellow FLOYD. 160 hours.

**Materia Medica and Therapeutics.**—Professor E. C. BRIGGS, Assistant O'CONNELL. 42 hours.

**Dental Pathology.**—Professor C. A. BRACKETT. 32 hours.

**Neurology.**—Instructor E. W. TAYLOR. 4 hours.

**Crown and Bridge Work.**—Professor COOKE, Instructors ELDRED, BELLIVEAU, HOVESTADT, BECKFORD, and PETERS. 128 hours.

**Orthodontia.**—Professor E. H. SMITH, Asst. Professor BAKER, Instructors HOWE, GILPATRICK, and Assistant PIERCE. 180 hours.

**Orthodontia, Second Year.**—Asst. Professor BAKER. 10 hours.

**Prosthetic Dentistry, Second Year.**—Asst. Professor CROSS. 32 hours.

**Prosthetic Dentistry, Laboratory, Third Year.**—Asst. Professor CROSS, Instructors HAYDEN, HALEY, L. A. ROGERS, LANGLEY, WESTON, CLARK, Demonstrator KAZANJIAN, Assistants McCULLAGH, SYKORA, PROVAN, LANE, RUELBURG, SHANNON. 496 hours.

**Prosthetic Dentistry, Laboratory, Second Year.**—Asst. Professor CROSS, Instructors DORT, EAMES, Demonstrator KAZANJIAN, Assistants FERNALD, PARKER, MACKINTOSH, SHINN, TRAVIS, MORGAN, LOOMER, WEINZ, FLAGG, JENKINS, MALMSTROM, STODDARD. 544 hours.



Prosthetic Dentistry, Laboratory, First Year. — Asst. Professor CROSS, Demonstrator KAZANJIAN, Assistant F. W. HOVESTADT. 44 hours.

Anatomical Articulation, Mechanical Treatment of Fractured Jaws, Cleft Palates, and other Deformities. — Asst. Professor CROSS. 21 hours.

Extracting and Anaesthesia. — Professor POTTER, Instructors FARRINGTON, MIDGLEY, NORWOOD, Assistants WOLFE, ANDREWS, and RING. 477 hours.

Porcelain Inlays and Carving Teeth. — Instructors OLDHAM, HADLEY, and MOPFATT, Assistant NESBETT. 142 hours.

Roentgenology. — Instructor CUMMINGS, 3 lectures and 350 radiographs.

Surgery, Surgical Pathology, and Oral Surgery. — Professor MONKS, 23 lectures and demonstrations; Professor MONKS, Instructor MINER, Assistant TAFT, clinics, 160 hours; Instructor BLAKE, 9 clinics at City Hospital.

Syphilis. — Instructor C. MORTON SMITH. 6 lectures and clinics.

Operative Dentistry, Seniors. — Professor POTTER. 32 hours.

Operative Dentistry, Juniors. — Lecturer DILL. 32 hours.

Operative Dentistry, Infirmary, Seniors. — Professor SMITH, Instructors LOVELAND, JEWELL, EDDY, BLAISDELL, STANLEY, PAUL, FURFET, CHUTE, ELLIOTT, PIKE, WHITEHILL, STONE, FURBISH, WHITCHURCH, Assistants VAUGHAN, HURLEY, W. A. DAVIS, CASWELL, CATHERON, DREA, MACDONALD, EMERSON. 624 hours.

Operative Dentistry, Infirmary, Juniors. — Lecturer DILL, Instructors SPINNEY, McPHERSON, F. T. TAYLOR, TISHLER, WYMAN, LEAVITT, STEVENS, Assistants HALLET, FREEMAN, SPEERS, PETERSON, ESTES, O'CONNELL, O. S. SMITH, ANDREWS, SAFFORD, EMERSON. 535 hours.

The work of the year is outlined in the following table: —

#### OPERATIVE DENTISTRY

No. of treatments of teeth and gums . . . . .	2,958
“ “ “ pyorrhoea alveolaris . . . . .	212
“ sets of teeth cleaned . . . . .	2,024
“ fillings — gold . . . . .	1,776
“ “ gutta percha . . . . .	298
“ “ cement . . . . .	2,126
“ “ amalgam . . . . .	2,438
“ “ amalgam and cement . . . . .	2,380
“ “ silicate . . . . .	266
“ patients . . . . .	4,126
“ operations . . . . .	14,387

#### PROSTHETIC DENTISTRY

##### SERVICE TO PATIENTS

No. of sets of artificial teeth . . . . .	324
“ “ “ repaired . . . . .	99
“ partial sets of artificial teeth . . . . .	195
“ patients . . . . .	716

##### PRACTICE WORK

No. of specimen plates . . . . .	365
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## CROWN AND BRIDGE WORK

## SERVICE TO PATIENTS

No. of crowns and caps . . . . .	207
“ crowns repaired . . . . .	41
“ pieces of bridge work . . . . .	109
“ “ “ repaired . . . . .	17

## PRACTICE WORK

No. of crowns and caps . . . . .	268
“ bridges . . . . .	158
“ carved teeth models . . . . .	28

## ORTHODONTIA

## SERVICE TO PATIENTS

No. of patients treated for irregularities of the teeth . . . .	87
“ appliances . . . . .	254
“ models of regulating cases . . . . .	172

## PRACTICE WORK

No. of appliances for irregularities of the teeth . . . . .	104
“ models for regulating cases . . . . .	52

## INLAY WORK

## SERVICE TO PATIENTS

No. of porcelain inlays and tips . . . . .	9
“ gold inlays . . . . .	53

## PRACTICE WORK

No. of porcelain inlays . . . . .	48
“ gold inlays . . . . .	48

## FRACTURED JAWS

## SERVICE TO PATIENTS

No. of cases . . . . .	23
“ appliances . . . . .	23

## PRACTICE WORK

No. of appliances . . . . .	104
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## SURGICAL DEPARTMENT

No. of cases of alveolar abscess, from infected teeth . . .	22
“ “ “ “ “ imbedded roots . . .	2
“ “ “ “ “ following fracture . . .	4
“ “ absorption following abscess . . . . .	3
“ “ antrum empyema . . . . .	10
“ “ arsenic poisoning . . . . .	1
“ “ ankylosis . . . . .	2
“ “ adenoids . . . . .	1

## SURGICAL DEPARTMENT.—Continued

No. of cases of amputation of root . . . . .	1
“ “ Bell's palsy . . . . .	1
“ “ carcinoma . . . . .	1
“ “ cleft palates . . . . .	3
“ “ curettement of socket . . . . .	2
“ “ dentigerous cysts . . . . .	3
“ “ epulis . . . . .	6
“ “ excision of frenum . . . . .	2
“ “ fracture of alveolar process . . . . .	2
“ “ “ “ jaw . . . . .	4
“ “ “ “ tooth . . . . .	2
“ “ gangrene . . . . .	2
“ “ hypertrophied tissue . . . . .	2
“ “ hemorrhage . . . . .	1
“ “ imbedded and impacted third molars . . . .	11
“ “ imbedded cuspid . . . . .	1
“ “ inflammation of tonsils . . . . .	1
“ “ “ “ maxillary joint . . . . .	1
“ “ lead poisoning . . . . .	1
“ “ leucoplakia . . . . .	1
“ “ necrosis of jaw . . . . .	6
“ “ neuritis . . . . .	3
“ “ osteomyelitis . . . . .	1
“ “ pyorrhoea . . . . .	3
“ “ ranula . . . . .	1
“ “ syphilis . . . . .	1
“ “ stomatitis . . . . .	1
“ “ sinus of cheek . . . . .	1
“ “ “ “ alveolar process . . . . .	1
“ “ supernumerary teeth . . . . .	1
“ “ submaxillary abscess . . . . .	1
“ “ tri-facial neuralgia . . . . .	4
“ “ tubercular glands . . . . .	1
“ “ inflammation of the gustatory nerve . . .	1

## SUMMARY

No. of operations in Prosthetic Department . . . . .	1,558
“ “ Operative Department . . . . .	14,387
“ “ Surgical Department . . . . .	5,679
	<u>21,619</u>

The library now contains 1,961 bound volumes, 241 volumes having been added during the past year. The cataloguing of the books is now practically completed and the usefulness of the library very much increased. It is open to students and to teachers until ten o'clock each week-day evening.

The specimens in the Museum have been carefully examined and many that were comparatively worthless as specimens have been cast aside. A number of them consisted of gold dentures, which have been broken up and sold, netting the sum of \$672, which has been placed to the account of the Endowment Fund.

Professor William H. Potter has delivered public lectures as follows:—

- Jan. 9, 1912. Haverhill Dental Society, Haverhill, Mass., "Local Anaesthesia, Nitrous Oxide and Oxygen Anaesthesia."
- Jan. 22, 1912. Cambridge Young Men's Christian Association, "Oral Hygiene."
- Feb. 29, 1912. Brockton, Mass., "Oral Hygiene."
- Mar. 22, 1912. "Oral Hygiene for Teachers," given in Professor A. O. Norton's course at Harvard University.
- Mar. 29, 1912. "The Care of the Teeth of School Children," before American School Hygiene Association, Harvard Medical School.

Professor William P. Cooke read a paper before the Massachusetts Dental Society on "The Prevention and Control of Dental Caries." He has also been active in societies and with legislative committees in the interest of a bill which shall legalize the dental nurse.

Professor Harold DeW. Cross read a paper on "Anatomical Occlusion," before the Lynn Dental Society. Dr. Cross has also experimented in casting processes and made investigations in the several processes of administering nitrous oxide and oxygen for complete and partial anaesthesia.

Dr. LeR. M. S. Miner has continued his studies on new growths of the alveolar process and presented his findings in a paper read before the Massachusetts Dental Society. The work included the production of experimental lesions in guinea-pigs which microscopically resemble the human lesions. He has now under way studies of the so-called abscess sacs found on the apices of roots of teeth.

Dr. George H. Wright read a paper on "The Teeth and their Relations to the Body," before the Massachusetts Medical Society (published in the *Boston Medical and Surgical Journal*). He has also been experimenting to obtain an artificial means of replacing a jaw lost through surgical extirpation; also, a method of using naso-pharyngeal plate to prevent adhesion of the soft palate to the pharyngeal wall after operations on adenoids and tonsils.

The Research Committee completed their work in the establishment of the Harriet N. Lowell Society for Dental Research. The Society has been doing excellent work during the year. The

student body has become much interested in research work and several papers of interest have been read before the society. The income of the Harriet N. Lowell Fund for Dental Research has been used by Dr. Miner in furtherance of his investigations.

Mr. H. Carlton Smith has continued his studies on oxydizing enzymes and has been fairly successful in the isolation and preservation of enzymes, particularly of oxideses, by separating the enzymes in an atmosphere free from oxygen, and preserving it in capsules covered with a very thin coating of stearic acids. In the investigation of the character of salivary acidity he has found that in a great majority of cases the acidity is wholly due to carbon dioxide. He has devised special apparatus for this experiment and is now at work on the relation of the viscosity of the saliva to the mucin content.

At the urgent request of members of the Boston Social Union the Infirmary was opened one evening a week during March and April, to provide an opportunity for the low-wage earners to obtain dental treatment without loss of income. Some 350 letters were sent to our Alumni and members of the Metropolitan District Hospital Association, outlining our plans and asking for volunteer workers. The Infirmary was opened on the evening of March 7, with nine practicing dentists in attendance and pledges on hand to insure that number one evening each week.

During the following eight weeks 284 patients were treated. Though the demand for the work increased rapidly, we were obliged to close the clinic on account of the expense. There is dire need for this kind of a clinic which cannot be met without an endowment.

In making the report of the men who during the past year have by research work and public lectures added to the knowledge of the profession, I wish to call your attention to our large staff of faithful teachers who continue to give their time at a great financial sacrifice. Were it not for their unselfish devotion we should be obliged to close the School. This condition is to be deplored and a substantial endowment is the only remedy.

EUGENE H. SMITH, *Dean.*

# REPORT OF THE DIRECTOR OF SCHOLARSHIPS IN THE MEDICAL AND DENTAL SCHOOLS

TO THE PRESIDENT OF THE UNIVERSITY:—

SIR,—I respectfully beg leave to submit the account of my work as Director of Scholarships for the past year:—

	Medical.	Dental.	Total.
Number of applicants for first-year scholarships . .	16		16
Number of applicants for other scholarships . . .	42		42
Number of students interviewed . . . . .	99	20	119
Total number of interviews . . . . .	336	46	382
Number of letters received and answered . . . .	347	56	403
Total number of students aided (exclusive of scholarships). . . . .	20	10	30
Number to whom money was loaned . . . .	18	10	28
Number to whom money was given . . . .	4		4
Amount of money loaned . . . . .	\$988.00	\$525	\$1,513.00
Amount of money given . . . . .	308.75		308.75
Sources from which money was obtained			
Private Fund . . . . .	1038.00	525	1,563.00
Francis Skinner Fund . . . . .	18.75		18.75
Anonymous Gifts . . . . .	200.00		200.00
Loan Fund of Class of 1879 . . . . .	40.00		40.00
Amount of money refunded . . . . .	463.00	415	878.00

FRANKLIN DEXTER,  
*Director of Scholarships.*

## THE LIBRARY

TO THE PRESIDENT OF THE UNIVERSITY: —

SIR, — As Director of the University Library and Chairman of the Council of the College Library, I beg to submit my report covering the year July 1, 1911, to June 30, 1912.

Except perhaps for the years 1638, when the Harvard Library was founded, and 1764, when it was burned down, the past year has been the most notable in its history. Never has there been greater activity in its different branches, never have the accessions, immediate or prospective, been so numerous and of such value, and, above all, never has it received a gift comparable to the Harry Elkins Widener Memorial Library, to which it now looks forward. Thanks to the princely generosity of Mrs. George D. Widener, the Harvard College Library is at last assured of a home that will house its treasures in an adequate manner and provide for their best administration and use. In the centre of the building will be Harry Widener's own priceless collection of books and manuscripts, — a lasting memorial to his character and to his tastes and even more to his affection for Harvard. The prospect is indeed splendid, but further comment on it may be reserved for future reports, when our dream of so many years past will have become a wonderful reality.

The growth of the College Library in 1911-12 has been satisfactory. The amount expended for books by it alone has been greater by fifty per cent than in any previous twelve months, though the total of volumes acquired has been exceeded twice before, when there have been gifts of large collections. The quality of the purchases has been unusually high, for besides those made from our ordinary income, perforce reserved for commonplace necessities, they have included many rare volumes and costly sets, which we owe to the use of certain restricted funds, and still more to the generosity of various donors. But this last source, however gratifying, is precarious. An important part of our accessions came from two trips in Europe made by Dr. Walter Lichtenstein (Librarian of Northwestern University, but also buying for Harvard and other institutions), who picked up books for

us with admirable skill and judgment. It is true, we were at our wits' ends as to where to house our acquisitions, but this apparently insoluble problem, which tormented us for so long, is at last almost pleasing as a reminiscence. For the next year or two the Library will cheerfully store its new books in any sort of safe temporary quarters, and with the glorious opportunity for usefulness now ahead, it must not relax for an instant its efforts to keep adding to the value of its collections.

The chief events in the administration of the College Library have been the substitution wherever possible of the printed standard size cards of the Congressional Library for our small written ones, and the beginning to print new standard cards of our own. Both of these operations have necessitated an amount of labor that would surprise any one not familiar with the complexities of such an enterprise. The quantity of comparison, correction, and revision it has meant has been rather appalling. Towards the end of August, 1911, after the necessary new catalogue cases had been put in, the work of the insertion of Library of Congress and other standard cards was taken up and was not completed until about November 1, 1912. During that time 323,000 new cards were prepared and inserted in the trays and about an equal number of old ones taken out. In spite of the difficulty and cost of the operation and the inconvenience to which it temporarily put many people, experience has only further convinced us of its necessity. Our own printing of cards started on November 1st, and has proceeded slowly and cautiously. The subscription of several other libraries to our cards helps to lighten a cost which otherwise might be heavy.

The pressing task of classification and reclassification has proceeded as fast as our straitened conditions have permitted. In 1911-12 18,038 volumes were arranged into new groups. Amidst the press of other business but little could be done for the subject catalogues except the carrying out of reforms previously decided upon.

The last year has been a notable one in the history of the Law School Library. Its growth has been unprecedented, — 21,447 volumes and 3,594 pamphlets. This will of course remain exceptional and the library may never again make a single splendid acquisition equal to the Olivart Collection,\* yet there is reason to believe that its rapid increase in recent years will continue, the

\* For details, see the Report of the Dean of the Law School.



more so as it is paying attention to fields it has hitherto rather neglected.

Between October 31st and November 8th, 1911, the library of the Divinity School was brought over into the new building of the Andover Theological Seminary. The two collections are now being merged into one, but the process must be slow.

The new wing of the Gray Herbarium has been completed, thus providing excellent and much needed accommodation for several thousand volumes.

As the various branches of the University Library increase, the tendency will be for them to spread out and to enrich their collections without asking whether the books they desire are already to be found in some other part of Cambridge. Considerable duplication is doubtless inevitable, for many works are useful to scholars in several subjects and should be represented at Harvard by several copies conveniently located. The professors in charge of the Departmental and of the special libraries are naturally quick to resent any suggestion that they are not the best judges of their own needs and of those of their pupils, and that they should be limited in their disposition of funds, which in many cases are due to their personal efforts. And yet from the point of view of the proper use of the University's resources, it is not satisfactory to have several departments buy copies of expensive books but rarely used in any of them. Harvard has some four or five separate and one might almost say rival botanical libraries, differing from each other in scope, yet tending to overlap in their purchases. In the case of the Law School, the Olivart Collection just acquired contains thousands of volumes duplicating ones already in the possession of the College. This is not of much consequence, even if we may question whether it would not be well to part with a few, rather than go to the expense of cataloguing them. It would be more serious if the Law School were to interpret the meaning of International Law as broadly as did Marquis Olivart, and embark on a policy of buying numerous works on international affairs, of the kind that are acquired by the College Library for historical and general purposes. For instance, today both have collections (between which there is little to choose) on such subjects as Morocco, Cuba, Latin American boundary disputes, etc. The need of an adjustment at least for the future is plain. As between the College and the Andover-Harvard Divinity libraries, the division is simpler, but even here such an important topic as Church History lies obviously in the field of both, as does

Canon Law which is also of interest to the Law School. Every one of our libraries thinks first of its own readers and wishes to possess whatever may be useful to them, regardless of conditions elsewhere. It is not always an easy matter to reconcile this natural and legitimate feeling with the broader policy of the University.

### ARCHIBALD CARY COOLIDGE.

## APPENDIX TO THE LIBRARY REPORT

### I

#### ACCESSIONS

The accessions to the University Library for the year and the present extent of each of its parts are shown in the following table:—

Accessions	Volumes added	Present extent in	
		Volumes	Pamphlets
College Library :—			
Gore Hall Collections . . . . .	26,125	586,872	400,850
Thirty-six Special Reference Libraries . . .	5,290	66,284	. .
Law School . . . . .	21,477	148,387	17,570
Divinity School . . . . .	968	39,757	11,175
Medical School . . . . .	957	18,637	39,994
Dental School . . . . .	229	1,806	13,000
Bussey Institution . . . . .	292	3,062	12,051
Museum of Zoölogy . . . . .	1,186	49,155	45,535
Peabody Museum . . . . .	1,369	4,800	4,497
Astronomical Observatory . . . . .	250	13,762	31,165
Gray Herbarium . . . . .	610	13,396	10,457
Arnold Arboretum . . . . .	1,958	26,706	6,640
Total . . . . .	60,656		
Deduct, transfers between Gore Hall and Department Libraries . . . . .	283		
Totals . . . . .	60,373	972,574	592,484
Andover Theological Seminary . . . . .	. .	62,764	37,128
Total number of volumes and pamphlets . .		1,664,900	. .

The additions to the College Library collection alone, excluding the special reference libraries, for the last five years have been as follows:—

ADDITIONS TO GORE HALL	1907-08	1908-09	1909-10 11 mos.	1910-11	1911-12
Volumes by purchase or exchange .	8,765	9,759	8,577	9,939	14,817
Do. by binding serials . . . . .	1,699	1,841	1,924	2,382	2,808
Do. by binding pamphlets . . . .	1,099	1,122	974	1,315	1,594
Do. by gift . . . . .	7,153	17,939	9,141	9,547	7,358
Do. of pamphlets bound together				48	53
Total volumes added . . . . .	18,716	30,661	20,616	23,231	26,125
Maps in sheets . . . . .	699	1,131	525	555	498
Pamphlets and serials * by purchase or exchange . . . . .	2,010	1,820	3,051	2,044	6,184
Pamphlets by gift . . . . .	14,873	19,611	17,348	21,848	17,120
Total gifts (vols., pams. and serials).	22,025	37,450	26,489	31,395	24,478

#### INCOME AND EXPENDITURE FOR BOOKS

The following table shows the income of the book-funds, receipts from other sources for the purchase of books, and expenditures for books during the last six years:—

INCOME AND EXPENDITURE	1906-07	1907-08	1908-09	1909-10 11 mos.	1910-11	1911-12
From book funds, —						
Balance from previous year .	\$5,140	\$5,726	\$5,723	\$5,029	\$2,163	\$4,257
Income of the year . . . . .	20,259	19,778	20,917	19,111	21,426	23,788
Total available . . . . .	25,399	25,499	26,640	24,140	23,589	28,045
Spent for books . . . . .	19,673	19,776	21,611	21,977	19,332	24,594
Balance to next year . . . . .	5,726	5,723	5,029	2,163	4,257	3,451
Special gifts, sales, etc. —						
Balance from previous year .	4,279	3,802	3,321	4,860	†4,241	4,337
Received during the year . .	10,115	5,351	7,246	11,948	11,521	19,164
Total available . . . . .	14,394	9,153	10,567	16,808	15,762	23,501
Spent for books . . . . .	10,592	5,832	5,707	8,567	11,425	22,463
Balance to next year . . . . .	3,802	3,321	4,860	8,241	4,337	1,038
Total spent for books, —						
College Library . . . . .	\$30,265	\$25,608	\$27,318	\$30,544	\$30,757	\$47,057
Dep't and Spec. Ref. Libraries (orders through Coll. Lib.)	7,642	5,914	7,436	8,339	9,239	†7,058
Total . . . . .	\$37,907	\$31,522	\$34,754	\$38,883	\$39,996	\$54,115

\* Not including current periodicals recorded on the periodical cards.

† The balance of the previous year was diminished by the transfer of \$4,000 to the Coolidge-Hay Fund.

‡ 1911-12 figures are for Special Reference Libraries only.

## SPECIAL REFERENCE LIBRARIES

The present extent of these libraries is as follows:—

SPECIAL REFERENCE LIBRARIES	Perma- nent	On Deposit	Totals
1. Chemical Lab. <i>Boylston Hall</i> . . . . .	3,260	1,255	4,515
2. Physical Lab. <i>Jefferson Phys. Lab.</i> . . . . .	690	19	709
3. Botanical Lab. <i>University Museum</i> . . . . .	1,279	120	1,399
4. Geological Lab. <i>Do.</i> . . . .	241	..	241
5. Mineralogical Lab. <i>Do.</i> . . . .	894	212	1,106
6. Phys. Geography Lab. <i>Do.</i> . . . .	259	184	443
7. Zoological Lab. <i>Do.</i> . . . .	422	..	422
8. Plant Physiology Laboratory. <i>Botanic Garden</i> .	153	..	153
9. Astronomical Lab. . . . .	82	..	82
10. Statistical Lab. <i>Dane Hall</i> . . . . .	247	..	247
11. Graduate Economics. <i>Dane Hall</i> . . . . .	76	..	76
12. Physiological Lab. <i>Lawrence Hall</i> . . . . .	65	..	65
13. Classics. <i>Harvard Hall 3</i> . . . . .	4,951	148	5,099
14. History. <i>Harvard Hall R. R.</i> . . . .	5,961	39	6,000
15. Economics. <i>Do.</i> . . . .	1,766	34	1,800
16. Social Ethics. <i>Emerson Hall.</i> . . . .	3,397	..	3,397
17. Philosophy (Robbins Library and Psychol. Lab.). <i>Emerson Hall</i> . . . . .	4,408	44	4,447
18. Child Memorial (English). <i>Warren House</i> . .	5,301	90	5,391
19. Lowell Memorial (Romance). <i>Do.</i> . .	1,644	6	1,650
20. German. <i>Do.</i> . .	1,579	..	1,579
21. French. <i>Do.</i> . .	2,634	..	2,634
22. Sanskrit. <i>Do.</i> . .	1,036	31	1,067
23. Semitic. <i>Semitic Museum</i> . . . . .	1,887	24	1,911
24. Mathematics. <i>Sever 22</i> . . . . .	997	94	1,091
25. Mining and Metallurgy. <i>Rotch Laboratory</i> . .	409	71	480
26. Engineering. <i>Pierce Hall</i> . . . . .	8,112	200	8,312
27. Forestry. <i>Do.</i> . . . .	17	39	56
28. Music. <i>Holden Chapel</i> . . . . .	1,168	..	1,168
29. Education. <i>Lawrence Hall</i> . . . . .	6,772	..	6,772
30. Business. <i>Do.</i> . . . .	793	1,075	1,868
31. Fine Arts (incl. Gray and Randall Coll.). <i>Fogg</i> <i>Museum</i> . . . . .	1,257	18	1,270
32. Architecture. <i>Robinson Hall</i> . . . . .	1,530	45	1,575
33. Landscape Architecture. <i>Robinson Hall</i> . . .	1,000	10	1,010
34. Bureau for Municipal Research. <i>Wadsworth House</i>	1,316	499	1,815
35. Preachers' Library. <i>Wadsworth House</i> . . . .	186	..	186
36. Phillips Brooks House Library . . . . .	500	..	500
Totals . . . . .	66,284	4,252	70,536

## SHELF DEPARTMENT

During the year the following groups were permanently classified:

Ancient History . . . . .	5,100
Egyptology . . . . .	296
Modern Latin Literature . . . . .	1,014
United States History (in part) . . . . .	11,628
Total . . . . .	18,038

## II

## FROM THE REPORT OF THE LIBRARIAN

The gifts of the year include no collections of great size, as has often been the case previously, but four at least deserve to be separately mentioned and described.

On March 19th, Professor Palmer celebrated his seventieth birthday by presenting to the Library his George Herbert collection, to which he has devoted years of loving care. This collection, which numbers 158 volumes, includes, besides the complete series of editions of Herbert's Works and copies of all the important manuscripts of his poems, the chief biographies from Walton down, the works of his six brothers, with autographs of each of them, works relating to Nicholas Ferrar, the head of Little Gidding, and whatever else "might incidentally throw light on the scenery and events of Herbert's life, his scholarly and political associates, and the sources from which he derived literary material." All of these books are described in "A Herbert Bibliography," compiled by Professor Palmer and published as number 59 of the Library's "Bibliographical Contributions." On the occasion of the presentation of the books, a company of Professor Palmer's friends and associates were invited to meet him in the Treasure Room of the College Library, when he described felicitously the pleasure he had had in bringing the collection together, its character, and his purpose in presenting it to the Library.

Mr. Thomas Hall, Jr., '93, who had been an Instructor in English in the University for fifteen years, died in August, 1911. From his library we received an unusually well selected collection of about 600 volumes of English literature, including many plays and some out-of-the-way and rare works.

From the late W. Bayard Cutting, Jr., who died on March 10, 1910, and who had for many years shown his keen interest in the growth of the Library, we received a bequest of about one thousand volumes from his own library, mainly of standard works on French and English history.

On the death of Rev. Edward H. Hall, '51, of Cambridge, a number of rare and early editions and other books, amounting in all to 120 volumes, were sent to the Library by his executors.

From many friends we have received gifts of money for the purchase of books, amounting altogether to \$16,951. A full list of the names of donors will be found in the Treasurer's report. The principal gifts have been:—

From Mrs. Louis Bettmann, of Cincinnati, in memory of her son, Milton Bettmann, '97, and of the quinquennial celebration of his class, and supplementing a former gift made some years ago, \$100.

From Mrs. E. D. Brandegee, of Brookline, for incunabula to be added to the Weld Memorial Collection, \$1,250.

From the Committee to visit the Department of Economics, for books on economics, \$745.12.

From Professor A. C. Coolidge, '87, for books on French and German history and for other purchases, \$5,500.

From Lady Sybil Cutting, for books on the history and art of Florence and other cities of Northern Italy, in memory of her husband, W. Bayard Cutting, Jr., '00, \$100.

From James L. Derby, '08, of New York, for books on the Philippines, \$50.

From William Endicott, Jr., '87, of Boston, \$1,500.

From Evan Randolph, '03, of Philadelphia, \$100.

For books in English literature and English history, from Alexander Cochrane, of Boston, \$1,000; from Ernest B. Dane, '92, of Boston, \$1,000; from the English Department, \$339.95; from Edward N. Fenno, Jr., '97, of Boston, \$100; from Charles Jackson, '98, of Boston, \$2,000; from Francis Skinner, '92, of Dedham, \$200; from Frank G. Thomson, '97, of Philadelphia, \$100; from Lucius Wilmerding, '01, of New York, \$50.

For additions to the Lefferts Pope collection, from William R. Castle, Jr., '00, of Boston, \$90; from John L. Saltonstall, '00, of Boston, \$50; and from Mr. Lefferts, the original owner of the collection, an early edition of Pope's Letters, acquired from a bookseller.

For early editions of Defoe, gifts amounting to \$220 from Ezra H. Baker, '81, of Boston; Tracy Dows, '94, of New York; Ogden L. Mills, '05, of New York; and Grenville H. Norcross, '75, of Boston.

For two years we have been indebted to Professor Roger B. Merriman, '96, for a gift of \$100 each year, for the purchase of books on Spanish history. A portion of the Cutting income has been devoted to the same purpose.

Annual gifts or gifts made in continuation of earlier ones have been received from Lawrence S. Butler, '98, of New York, \$50 for books on Paris; from Harold J. Coolidge, '92, of Boston, \$50 for books on China; from John Craig, of Boston, \$250 for books on the Theatre in connection with his Prize for Dramatic Composition; from the Dante Society, \$50 for books on Dante; from Ellis L. Dresel, '87, of Boston, \$50 for German drama; from J. Hays Gardiner, '85, \$10 for books on Burmah; from George L. Kittredge, '82, \$60 for books illustrating the history of witchcraft; from John S. Lawrence, '01, \$10 for biographies of successful men; from James Loeb, '88, of New York, now of Munich, \$100 for labor periodicals; from Edwin S. Mullins, '93, of Hyannisport, \$50 for Folklore; from Walter W. Naumburg, '89, of New York, \$100 for the Shakespeare collection; from an anonymous giver, for books on Western History as a memorial to Charles Elliott Perkins, \$1,000; from William Phillips, '00, Secretary of the American Embassy in London, \$100 for books on London; from the Saturday Club, of Boston, \$300; from Horace B. Stanton, '00, of Boston, \$25 for books on Molière. These numerous gifts for special purposes add greatly to the strength and reputation of the Library by building up special collections in ways quite beyond what our ordinary income would provide for.

## APPLETON CHAPEL AND PHILLIPS BROOKS HOUSE

TO THE PRESIDENT OF THE UNIVERSITY:—

SIR, — No significant changes have taken place in the administration of the University Chapel during the past year. Experience has abundantly justified the change of the Sunday service to the morning hour. The attendance of the Cambridge public at that service has diminished; that of the University constituency, apart from the students, has increased. The average attendance of students remains about as last year. In the uniformity of this attendance there has been great gain. The report of the Chapel Committee, appointed by the Phillips Brooks House Association, contains the following paragraph: "The student attendance is now almost as large as is possible under the present arrangements, as two hundred and fifty men more than fill the south side of the Chapel. For this reason, many students who come late are now unable to find seats, there being no seats in the gallery owing to the large numbers of the Cambridge public attending every Sunday. The average total attendance for the last six months has been exactly four hundred. As more than half of these are students, and only two hundred seats are reserved for them, under the present system it seems that the day is not far distant when the number of seats reserved for outsiders will have to be materially decreased." On an October Sunday, 1912, in accordance with this suggestion, the south gallery was reserved for students and practically filled by them.

A special service for Freshmen was held on a week day evening last year, at which the President, Professor Bliss Perry and the Chairman of the Board of Preachers spoke. The Committee above mentioned has made it its business to bring the work of the Chapel to the attention of every member of the Freshman class. At eleven o'clock on the morning of Good Friday, without suspension of the regular university exercises, at the written request of nearly two hundred students, the Communion of the Lord's Supper was observed in the Chapel. This service was attended by two hundred and fifty-nine persons, two hundred and twenty-eight of whom were students. Owing no doubt to the greater place held in the university life by the Sunday service, and to the

closer relation which now obtains with the Phillips Brooks House, the attendance at the daily service of morning prayers shows an increase in the average of about ten per cent as compared with the previous year.

In my last report I stated that the greatest need of the Chapel was that of a new organ. This need has now been met through the generosity of two friends of the University especially interested in the Chapel work. The organ has been built by the E. M. Skinner Co., of Dorchester, and is of the highest order. It should have been in place on the 20th of September; it is hoped that it may be in use before Thanksgiving Day. Too much cannot be said of the work of Dr. Davison, the organist and choirmaster, and of the student choir under his direction. They have been able to avail themselves of music, both mediaeval and modern, which is little used in ordinary choirs, but most appropriate for a university chapel. The Christmas Choral Service has taken its place in the university life.

It has always been the ideal that the Chapel and the Phillips Brooks House should work in close coöperation, the House being the parish house of the Chapel and furnishing the organization and apparatus for the charitable, philanthropic and social activities of the men, one centre at least of whose devotional life is in the Sunday and daily services of worship. This ideal has never so nearly approached fulfilment as at present. The House has never stood better in the mind of the University as a whole, the interests of the Chapel have never been more truly considered or more earnestly furthered by the organizations at the House. Both House and Chapel owe much to the aid which *The Crimson* and other student periodicals generously afford. Chapel and Brooks House topics have place in student discussion in a manner which is gratifying. In the manner here indicated, suggestion has made been that the revision of the University Hymn Book be not too long postponed.

Mr. Arthur Beane, who served as Graduate Secretary last year, has been re-elected for a period of three years. The administration of the House is thus given a permanence which it has greatly lacked. The necessary expenses of the Phillips Brooks House Association, the central organization at the House, have increased of late years, although it is believed that this increase is only in proportion to the efficiency of the work. The margin of these costs, over and above the income of a small endowment fund



which the University holds in the name of the House, has always been sought in the way of private subscription from interested friends. It is the opinion of the Advisory Committee that material addition should be made to the endowment. For the first time, this year we have a regularly appointed Assistant Secretary for the Law and Graduate Schools, and the great increase in the membership and activity of these branch associations is one of the things which we have to record. The University Bureau of Information for new students has been placed entirely in the hands of the Brooks House Association, and is conducted at the House. This Bureau was opened two weeks before the opening of the term and with the annual Harvard Handbook, also published by the Association, rendered great service to new men.

The individual societies which together constitute the Brooks House Association have membership as follows:—

Phillips Brooks House Association (direct) . . . . .	184
Harvard University Christian Association . . . . .	305
St. Paul's Society . . . . .	300
St. Paul's Catholic Club . . . . .	250
Graduate School Christian Association. . . . .	60
Harvard-Andover Divinity Club . . . . .	55
Total . . . . .	1,154

The above-named total number is one-third larger than the corresponding figure for last year. Making all deduction for graduate student membership, it appears that nearly half of the undergraduate body is connected with one or another of the societies having their centre at the Brooks House.

The work of the Social Service Committee has been in charge of Mr. D. P. Ranney, who has had the assistance of Mr. Elliott Dunlap Smith, the former Social Service Secretary. Three hundred and forty-eight men have been engaged in the work, eighty per cent of these being undergraduates. The attitude of the Settlements and of the other organizations in Boston and vicinity toward the men sent out by the University is one of uniform appreciation. The spring conference at the Brooks House between settlement leaders and student workers, and the system of inspection of student work by a representative of the House, is largely responsible for the gain in this regard. The Harvard Medical School in China, which has begun its active work in Shanghai this year, has been granted the use of an office in the Phillips Brooks House.

EDWARD CALDWELL MOORE.

## THE GRAY HERBARIUM

### TO THE PRESIDENT OF THE UNIVERSITY:—

SIR, — During the past academic year the regularly employed staff of the Herbarium has consisted of a Curator (Asa Gray Professor of Systematic Botany), an Assistant Professor of Botany, a Librarian, an assistant in the library, an assistant engaged chiefly in the sorting and distribution of specimens, and an assistant occupied chiefly with the mounting of specimens. As supplementary aids the following persons have been employed for portions of the year: Mr. C. A. Weatherby, from July 1 to September 30, in determinative work and in the distribution of specimens; Miss H. E. Day, in bibliographical indexing; Mr. A. F. Hill, as an assistant in instruction, and Mr. H. T. Darlington, in field work.

The more noteworthy collections of plants received have been as follows: I. *By gift or in exchange*: from the United States National Museum, 1,015 miscellaneous duplicates, including 188 plants of Maryland collected by Mr. G. H. Shull, and 121 specimens in continuation of Mr. C. L. Pollard's series illustrating the North American forms of the genus *Viola*; from the United States Bureau of Plant Industry, 162 specimens of *Gramineae*, largely of the genus *Bouteloua*; from Dr. A. S. Pease, 6,589 specimens, being all of his personal herbarium except the New England plants and comprising a carefully mounted collection of well selected specimens, including a considerable number from Switzerland, Italy, and Greece; from Professor J. F. Collins, 1,021 specimens of vascular plants from his private herbarium; from the New York Botanical Garden, 587 plants of Cuba; from the University of California, 433 plants, chiefly of California and including many of exceptional rarity and interest; from the Geological Survey of Canada, 148 plants, mostly from the shores of Hudson Bay; from Mr. F. S. Collins, 128 plants of the Bermuda Islands; from Mr. John Davis, 194 plants of Missouri; from Mr. F. F. Forbes, 100 specimens to be used in the continuation of the *Exsiccatae Grayanae*; from Mr. Earl E. Sherff, 103 plants of Illinois; from Professor L. H. Pammel, 119 plants of western Canada. II. *Acquired by purchase*: from Mr. T. S. Brandegee, 464

plants of Mexico, collected by Dr. C. A. Purpus; from Mr. C. M. Weber, 267 plants of the Philippine Islands; from Professor I. Urban, 192 plants of San Domingo, collected by H. von Türckheim; from Mr. R. M. Holman, 100 plants of the Philippine Islands; from Dr. H. A. Gleason, his personal herbarium, including 5,116 specimens, in large part representative of the prairies of the Mississippi Valley; from Professor Aven Nelson, 1,724 plants of Idaho; from Professor A. A. Heller, 202 plants of Nevada, Utah, and Montana; from Mr. B. F. Bush, 326 plants of Missouri; from Mr. Earl E. Sherff, 551 plants of Illinois, Missouri, and Arizona; from dealers: Kneucker's *Glumaceae Exsiccatae*, fascicles 47-49; Fiori's *Flora Italica Exsiccata*, centuries 15 and 16; Petrak's *Flora Bohemiae et Moraviae Exsiccata*, distributions 1-8, including 843 specimens; Buchtien's *Herbarium Bolivianum*, century 1; and Ross's *Herbarium Siculum*, century 8. III. *Collected by members of the staff*: by Professor Fernald and assistants, 10,554 specimens from Newfoundland; by the Curator, 196 plants of the Bermuda Islands and 603 plants from the coastal portions of South Carolina and Virginia.

The entire number of specimens received from all sources has been 27,059. The number of sheets of mounted specimens added to the organized portion of the Gray Herbarium has been 16,960, being the largest annual addition recorded, and bringing the whole number of sheets in the collection to 484,541.

To the library of the Herbarium there have been added 610 volumes and 442 pamphlets. The library contained, June 30th, 13,396 volumes and 10,457 pamphlets. There have been published four issues of the Card-index of New Genera and Species of American Plants, together amounting to 8,074 cards. This exceedingly useful bibliographical index, edited by Miss Mary A. Day and published by the Gray Herbarium, now contains 100,781 cards and has become by far the most extensive botanical undertaking of its kind.

Again notable progress has been made toward the safe housing and far more perfect equipment of the Herbarium. With generous gifts mentioned in the last report, it has been possible during the year to rebuild in a thoroughly safe manner and on a considerably enlarged scale two more sections of the building. One of these, forming a wing toward Garden Street and being the gift of an anonymous donor, provides ample and highly perfected accommodation for the library of the Herbarium, also two private offices, a room for convenient disposition of stored publications,

maps, files of correspondence, labels, etc.; also, in the basement, a pressing room, conveniently arranged for the preparation of specimens and systematic storage of presses, driers, vascula, and the various implements used in equipping collectors, two store-rooms, and a well-ventilated photographic dark-room.

In the opposite direction, toward the conservatories, a two-storied fireproof wing, to be known as the George Robert White Laboratories of Systematic Botany, has been built with Mr. White's gift for the purpose, recorded in the last report. This wing, replacing a smaller one built in 1871, by Mr. H. H. Hunnewell, contains two excellent laboratories, fully appointed as to plumbing, electricity, microscope-lockers, projecting lantern, etc., an instrument room, a room for stored collections, a private office, and a room which is being put at the disposition of the New England Botanical Club for its large and valuable local herbarium; also, in the basement, the engine room, work-shop, etc.

Work upon these important additions was somewhat delayed by a variety of difficulties, such as exceptionally unfavorable weather conditions, the enforced absence of the Curator during a portion of the year from considerations of health, and the temporary leave of absence accorded to the Inspector of Buildings. However, it is a pleasure to report that the structures have at length been completed in a very satisfactory manner and at a cost well within the anticipated expense.

At the end of the academic year the only portion of the building still to be reconstructed was the central section, about fifty-five feet deep and thirty-five in frontage. A generous gift of \$10,000, from a donor who wishes to be anonymous, has recently been received to permit the rebuilding of the front portion of this central section, that is to say, the part in front of a transverse wall and to be in its reconstructed form a three-storied structure containing a vestibule and five rooms for special purposes, which can be described in greater detail in the next report. The gift is very highly valued as it will permit the completion without great delay of the main façade of the building, so that final grading and appropriate planting of the surrounding grounds may be undertaken in a manner to give the building a proper setting in the Garden. The plans for this part of the building being already carefully prepared, it has been possible to let the contract at once and the work is already started.

The subsequent rebuilding of the large central room, about thirty-five feet by thirty, will still be necessary to complete the

whole programme. It is an undertaking of little structural difficulty, but will entail considerable expense from the large amount of steel furnishings, chiefly herbarium cases, needful to complete it in accord with the high standard carefully preserved in all other portions of the building.

The reconstruction, a portion at a time, of a large building, filled with extensive, delicate, and valuable collections, is naturally an undertaking involving due caution, careful planning, and time-consuming re-arrangements of collections, re-numbering, re-indexing, etc., all of which must of necessity temporarily hamper more scientific work. Nevertheless, the Herbarium has been kept continuously open to visitors, both the plants and the library having been almost continuously accessible for consultation. Furthermore, determinative work, investigation, correspondence, publication, field-work, bibliographical indexing, and the mounting and distribution of specimens have all proceeded without serious interruption, the additions to the organized collection actually being more numerous than in any previous year. During the rebuilding of the laboratories, it was necessary to conduct the elementary course in systematic botany at the Botanical Museum, a room being kindly supplied for the purpose by the Honorary Curator of the Museum.

The newly built portions of the Herbarium already furnish convenient work rooms and shelving for the whole library and more than half of the plant collections, so that the completion of the rebuilding can be effected with even less interruption to the scientific activities of the staff or accessibility of the collections.

During the summer of 1911 Professor Fernald, in company with Professor Karl M. Wiegand of Wellesley College and Mr. Edwin B. Bartram, and assisted by Mr. H. T. Darlington, made another highly successful collecting expedition to Newfoundland, exploring chiefly the eastern-central and southeastern portions and acquiring not merely a large amount of interesting material for study and exchange, but also exceptionally telling data regarding plant-distribution in general and the origin of the Newfoundland flora in particular, — data which strongly corroborate Professor Fernald's convincing hypothesis of a former land bridge between Newfoundland and the eastern coast of Nova Scotia and coastal plain of New England.

The Curator in two southern journeys, from January to May, made as extensive collections as time and season permitted in the Bermuda Islands, coastal South Carolina, and "tide-water Vir-

ginia," thereby considerably amplifying the representation of the spring flora of these regions in the Gray Herbarium.

As for many years past the Visiting Committee has shown loyal and helpful interest in the work of the Herbarium, issuing again their annual circular to which 110 contributors gave cordial response in gifts ranging from three to one hundred dollars, donations recorded in the report of the Treasurer.

During the year twenty-nine scientific papers have been published by the Gray Herbarium. As their titles have been fully recorded in the *University Gazette*, they need not be repeated here.

B. L. ROBINSON, *Curator*.

## THE BOTANIC GARDEN

TO THE PRESIDENT OF THE UNIVERSITY: —

SIR, — As Director I have the honor to present my third annual report on the progress and condition of the Botanic Garden.

As a matter of record the report of Mr. Robert Cameron, Head Gardener, is here included: —

The early part of the year was dry and unfavorable for the growth and welfare of the plants in the Garden. Fortunately, copious rains in the fall completely revived them. The fall was exceptionally mild and much work was done in replanting and renovating the order beds.

The winter was very cold, but few losses were sustained.

The spring flowers, such as tulips, hyacinths, and irises, bloomed unusually well and attracted much attention.

June was the driest month we have experienced in many years, and vegetation suffered severely.

The population in the part of Cambridge where the Garden is located has increased in the last decade and consequently the Garden is visited by larger numbers of people, especially in the spring and fall.

School teachers with their classes visit us more frequently than in former years.

Students of the University take much more interest in the plants. This is especially true of those who are studying landscape architecture.

The plants in the greenhouses are all in good, healthy condition.

From J. M. Bailey, Director of the Botanic Garden at Brisbane, Australia, a series of Australian orchids and ferns was received early in the year which added many desirable species of botanical interest to the collections.

As in former years, Messrs. R. & J. Farquhar & Co. presented bulbs and seeds, which have been useful for supplying material for study and decoration.

In addition to supplying specimens for laboratory studies and for the lecture room the collections are beginning to mean more to the students in Botany 1 than heretofore through the influence of supervised excursions. In small sections the students are conducted to the Garden, several times through the spring, and as a result of these excursions it has been found that some of the students return for voluntary study. Professor Osterhout continued to use the laboratory, and the space assigned to him in the greenhouses, for work in Botany 13 and for research.

Mr. B. M. Watson's class in Landscape Architecture 6 met regularly at the Garden on Saturdays from November to April, studying practical horticulture. Aside from the instruction given relative to grafting, propagation by cuttings and the care of seedlings, the students were able by independent observations to become familiar with the more useful and ornamental garden plants.

In connection with the State Forester's Office, the propagation and distribution of the fungus disease, *Entomophthora Aulicae*, of the brown-tail moth larvae was continued. From April 1 to June 30, under the direction of Mr. R. H. Colley, Austin Teaching Fellow in Cryptogamic Botany, the work was carried on in House 14. By the use of improved methods in handling and infecting the caterpillars the distribution of a larger number of diseased larvae was made possible than in any previous season. With the coöperation of the State Forester's Office diseased caterpillars were planted in badly infested areas all over eastern Massachusetts. Besides this distribution approximately one hundred tubes of infected larvae were mailed to private individuals. Under the very favorable weather conditions of May and June the fungus spread rapidly and caused a mortality which in some localities ran as high as 98-100%. This wholesale destruction was also in evidence in areas planted in the fall of 1911, where a marked decrease was found in the number of larvae which survived the fall epidemic and the winter. By June 10th these areas appeared to be practically free from infestation. There is every reason to believe that the propagation and distribution of this fungus disease is materially reducing the number of brown-tail caterpillars in Massachusetts.

In the disease of the chestnut, caused by a fungus parasite which is at present incompletely understood, we have a very serious danger to guard against. Where this disease has appeared the chestnut has been practically exterminated in spite of every remedy applied. In June, in connection with the work being done at the Garden to control the brown-tail and gypsy moths, experiments were started, under the supervision of Dr. Farlow, for the purpose of obtaining a clearer knowledge than we now have of the chestnut blight, with a view to the discovery of some means to hold it in check. In 1906 the fungus which causes the disease was described as a new species under the name *Diaporthe parasitica*. Whether or not this fungus is a new species, its systematic position is at this time of interest and importance, in revealing its origin, whether endemic or exotic.



At the Harvard Experiment Station near Cienfuegos, Cuba, the production of seedling sugar cane was continued and studies of introduced economic plants carried on by Mr. Robert M. Grey. Mr. Grey's monthly reports indicate that the work at the station is progressing satisfactorily. In August, the seedling canes raised in 1912 numbered 2,200. Among this number are several canes which give promise of excellent qualities advantageously combined.

Throughout the year, in connection with the Bureau of Science at Manila, the Director has carried on his studies of the orchid flora of the Philippines. The results of these studies are published from time to time in the *Philippine Journal of Science*.

To maintain the Garden in its present state of efficiency expenditures greatly exceed the income. A substantial increase in invested funds is not only necessary to remove the need for annual subscriptions but to enable the Director to increase the collections and to keep the greenhouses and grounds in first-class condition.

OAKES AMES, *Director*.

## THE BOTANICAL MUSEUM

TO THE PRESIDENT OF THE UNIVERSITY:—

SIR, — I have the honor of presenting the following report on the condition of the Botanical Museum.

Considerable accessions to the stock of illustrative material in Economic Botany have been received during the past year, and a large part of this has already been safely stored in the new form of containers, where it can be conveniently examined as occasion requires. These occasions for consulting our specimens are becoming more frequent, since year by year it is more widely known that our collections are available for comparison and identification of "raw materials."

The space which we can devote to the installation of type-specimens in exhibition-cases is very limited, and therefore it has been found necessary to withdraw from our shelves certain groups of manufactured products, which, although extremely interesting in connection with the plants from which they are derived, belong more strictly in a technological cabinet. For instance, some exceedingly fine illustrations of manila rope have been taken out of the exhibition-case of fibres, to give room to the specimens of untwisted strands. Unquestionably a technological exhibit would prove highly useful in connection with certain of our college courses, but we cannot longer develop this side of our Botanical Museum without throwing the rest out of proportion. For the present, we shall retain in our reserve a great part of these manufactured products, and we shall stand ready to transfer them to an industrial collection at the proper time.

But, wherever it is possible to do so, we shall keep in our cases some of the more striking products, which do not encroach too much on our space, as illustrations of the drift of modern industry. Thus among the newer developments in the cellulose industry, we have installed interesting specimens of artificial silk, produced from wood-pulp or its equivalent, by the three most successful processes.

We are retaining among our forest-products on the exhibition-shelves, certain barks and leaves formerly much used in tanning,

but now falling into disuse, on account of their being displaced by the newer chrome methods. And we shall exhibit for some time longer, illustrative specimens of the madders and indigo which are being crowded out of cultivation by the anilin and alizarin dyes. It must be understood that type-specimens of most of these plant-products are accessible in our store-rooms, in sufficient quantities for physical and chemical investigation.

Very few changes have been made in the collection of fossil-plants, but the specimens selected by Dr. Robert T. Jackson for exhibition on the third floor have been provided with more distinctive labels.

Mr. Rudolph Blaschka states that the next invoice of glass models of flowers will be ready for shipment the coming winter. He had expected to finish this series, consisting of illustrations of insect visits to flowers, some months ago, but the extreme difficulty of constructing the models of insects has delayed him. We have made some changes in the arrangement of a few of the specimens illustrating the economic plants, but without disturbing the general plan.

It is pleasant to note the greatly increased use of this popular display of glass-models by the teachers of our public schools. It is becoming almost impossible to furnish pupils in our cities with good specimens of our common wild flowers: in the Ware collection of Blaschka models the wild flowers are faithfully shown and the principal parts exhibited on an enlarged scale. The importance of the collection as a synoptic view of our flowering plants will be best realized when it is known that 147 natural families, 520 genera, and 694 species are now fully illustrated. Moreover, practically every important term employed in the description of all Phaenogamia is clearly illustrated in this collection by the roots, stems, and leaves, and by over 2,900 magnified details. It is gratifying to report that as a rule the school teachers make use of the exhibition-rooms without causing inconvenience to the increasing number of our visitors. The pamphlet issued for general distribution last year has proved useful, and an enlarged edition is in contemplation.

The most interesting acquisition during the year was a volume of exquisite paintings of all the plants described in Rev. Henry N. Ellacombe's "Plant-lore and Garden-craft of Shakespeare." These water-colors are full of artistic merit. It has not yet been finally determined how the plates can be most advantageously displayed. The collection consists of 182 paintings by the late

Miss Rosa M. Towne of Philadelphia, and is the gift to the University from the Estate of William E. Towne of the same city. It gives me pleasure to report that the expenses of the Museum have been met by the gifts of a few friends of the University. No attempt has yet been made towards securing a permanent fund for the maintenance of the Botanical Museum, but it will be absolutely necessary in the near future to provide for the care of the Museum, when its present Curator retires.

GEORGE LINCOLN GOODALE,  
*Honorary Curator.*

## THE ARNOLD ARBORETUM

TO THE PRESIDENT OF THE UNIVERSITY: —

SIR, — I have the honor to submit the following report on the progress and condition of the Arnold Arboretum during the year ending June 30, 1912.

Little new construction has been undertaken during the year, and work in the Arboretum has been largely confined to the care and extension of existing plantations, and to the protection of these and the natural woods from the attacks of destructive insects which in many species abound in the Arboretum. To keep these in check now means much hard work and a large expenditure of money, and greatly increases the difficulty of properly maintaining a garden like the Arboretum.

Mr. William Purdom has completed his three years' contract to explore northern and western China for the Arboretum, and returned to Europe in May. He left Peking late in the winter of 1911 and was able to reach Min-Chau on the T'asho River in southern Kansu in the spring of that year. He was prevented, however, owing to the disturbed condition of the country, from extending his journey to the high mountains surrounding the Monastery of Chusan, near the Tibetan border of Kansu, which it was hoped he would be able to explore. Political disturbances, too, delayed his return journey to Peking and caused the loss of a part of his collections. His three years' explorations, while they did not result in the introduction of a large number of new species of plants, were on the whole successful, and he was able to make valuable contributions to the knowledge of the Chinese flora. His most interesting discovery is, perhaps, the wild form of the Moutan or Tree Peony, which he found growing on a mountain in southern Shensi, in the region believed to be the cradle of the Chinese race. Forms of this Peony have been cultivated for centuries in eastern Asia, where they are among the most beloved of all plants, but the wild origin of the cultivated plant has remained unknown to Americans and Europeans until Purdom found it in 1910 and sent seeds and a few roots to the Arboretum.

The library now contains 26,706 bound volumes and 6,640 unbound pamphlets, 1,959 volumes and 102 pamphlets having been added during the year.

During the year 6,300 sheets have been inserted in the herbarium; and 2,895 sheets of duplicates have been distributed in exchange. In addition to these, sets of duplicates of the dried plants collected by Wilson in China, as far as these have been named, have been acquired by the Smithsonian Institution, the British Museum, the Royal Gardens at Kew and at Edinburgh, the Imperial Botanic Garden at St. Petersburg, the Hamburgische Botanische Staatsinstitute and the Naturhistorisches Hofmuseum at Vienna.

The interchange of plants and seeds with other horticultural and botanical establishments has been continued during the year. 8,052 plants, including grafts and cuttings, and 484 packets of seeds have been distributed as follows: To the United States, 7,244 plants and 153 packets of seeds; to Great Britain, 515 plants and 189 packets of seeds; to the continent of Europe, 293 plants and 116 packets of seeds; to Japan, 26 packets of seeds. There have been received 844 plants and 452 packets of seeds; of these, 767 plants and 161 packets of seeds came from the United States; from the continent of Europe, 77 plants and 111 packets of seeds; from Japan, 32 packets of seeds; from China, 147 packets of seeds; and from New Zealand, 1 packet of seeds.

During the year instruction in dendrology has been given at the Arboretum by Assistant Professor Jack to students in forestry and to a class of twenty-three special students, principally teachers.

Two parts of the *Plantae Wilsonianae*, or about one-third of the work, have been published during the year. This is an enumeration of the woody plants collected by Wilson in China for the Arboretum, with descriptions of the new species and the elaboration of some of the important genera as represented in the whole of China. In this work the staff of the Arboretum has received valuable assistance from several European specialists. Dr. E. Koehne of Berlin has elaborated *Philadelphus* and *Prunus*; Dr. E. Janczewski of Krakow, *Ribes*; Dr. W. O. Focke of Bremen, *Rubus*; Dr. Th. Loesener of Berlin, *Ilex*; Dr. F. Gagnepain of Paris, the *Vitaceae*; and Dr. Camillo Schneider of Vienna, *Syringa*.

During the year the first volume of the *Bradley Bibliography* has appeared and the printing of the second volume has been completed. This work, which will be finished in five volumes, contains an account of all printed books and of all articles in any

way relating to woody plants in periodicals and other serial publications in all languages published before the end of the last century. Volume I includes all botanical publications containing references to these plants, except those which are restricted to a particular family, genus, or species which are found in the second volume. The third volume will contain the titles of publications dealing with the economic products and uses of woody plants, and with arboriculture, including the ornamental value and uses of trees and shrubs. The fourth volume will be devoted to publications on forestry, and the fifth volume will contain an index to all titles enumerated in the work arranged alphabetically according to authors and titles. This work, which has involved a large amount of labor, has been in charge of Mr. Alfred Rehder of the Arboretum staff, who has devoted most of his time to it during the last twelve years and who has examined for it all the principal botanical, horticultural, and forestry libraries in the United States and Europe and obtained the assistance of many European specialists.

Twenty numbers of the *Bulletin of Popular Information* have been issued during the year. The object of this Bulletin is to give at irregular intervals information about plants in the Arboretum of special interest. The Bulletins are issued gratuitously to any one on application and now go to many parts of the United States and to several European countries. The fact that these Bulletins are often reproduced in horticultural journals and in daily papers seems to show an increasing interest in the cultivation of the plants which they describe.

It has only been possible to administer the Arboretum, to increase its activities and to meet the demands which are made on it from all parts of the world by the interest and generosity of many persons living in the neighborhood of Boston and in other parts of the country. Four years ago, following the example of the Massachusetts General Hospital and the Museum of Fine Arts, an effort was made to increase the income of the Arboretum by application to its friends for annual subscriptions. During the year 1908-09 this subscription produced \$15,810; in 1909-10 it amounted to \$19,110; in 1910-11, to \$20,625; and in 1911-12, to \$26,755. Annual subscriptions have been usually in sums of \$100; a few only have been for smaller amounts, and some have been larger. The success of these subscriptions is largely due to the assistance which I have received in this undertaking from the Committee appointed by the Overseers to visit the Arboretum.

Without the industry, enthusiasm, and influence of the members of this Committee it would have been impossible to continue the development of the Arboretum, and I take this opportunity to express my obligation to them for the help they have given me in carrying out the provisions of the Trust established by the executors of James Arnold.

C. S. SARGENT, *Director*.



## THE CHEMICAL LABORATORY

TO THE PRESIDENT OF THE UNIVERSITY:—

SIR, — Owing to the death of Professor Sanger, Director of the Chemical Laboratory, in February, Assistant Professor Baxter served as Acting Director for the remainder of the year.

A well-marked and very encouraging increase of about twenty per cent in the total number of students taking courses in chemistry over the number in 1910-11 brought the registration well above the previous maximum of 1904-05. The increase occurred chiefly in the elementary courses, although the advanced courses were almost universally larger than the year before.

The number of research students also was slightly larger. The following subjects were investigated by students under the direction of members of the Division:—

Professor Jackson: Sulphoorthoquinones; iodanil; the action of sodium hydroxide on tetrabromorthoquinone; some reactions of iodtribromnitrobenzol; the replacement of halogen by hydrogen in derivatives of benzol containing the nitro groups and halogens.

Professor Richards: Revisions of the atomic weights of uranium through uranium tetrabromide, of aluminum through aluminum bromide, of carbon through the ratio of sodium carbonate to sodium sulphate, and of silver through the analysis of lithium perchlorate; the compressibility of homologous hydrocarbons; the heats of combustion of homologous hydrocarbons; the heats of neutralization of typical alkalies and acids as determined by adiabatic calorimetry; the electro-motive force of thallium amalgams.

Assistant Professor Baxter: Revisions of the atomic weights of phosphorus by the analysis of phosphorus tribromide, of iron by the reduction of ferric oxide, of arsenic by the titration of arsenious acid against iodic acid, of neodymium by the analysis of neodymium chloride; the preparation of pure prae-seodymium salts; the determination of potassium as chloroplatinate; the changes in volume during the solution of certain salts in water.

Assistant Professor Henderson: The racemization of glucose.

Dr. Forbes: The constancy of transference numbers as determined with the use of a partially rectified current; a new apparatus to measure the pressure of corrosive gases at constant volume;

concentration cells involving complex argentichloride ions; the relation between heats of fusion of eutectic mixtures and the heats of fusion of their components; the reduction of chromic acid at a platinum cathode.

Dr. Clarke: Preparation of certain paraffine hydrocarbons in homologous series of hexanes, heptanes, octanes, and nonanes; the splitting of aminobenzhydrols and aminoaryl benzhydrols by halogens; the action of fuming nitric acid on iodanil; the reduction of zinc ores.

Dr. Kelley: Cyclic ketones.

Twenty-one papers were published, chiefly on investigations conducted during 1910-11. The titles of these papers may be found in the *University Gazette*.

The laboratory continued to benefit by the generosity of the Carnegie Institution of Washington from grants in aid of research, of \$3,000 to Professor Richards and of \$1,000 to Assistant Professor Baxter.

Mrs. Charles R. Sanger has very generously given to the Chemical library a large number of valuable text-books and sets of periodicals which belonged to Professor Sanger.

Work upon the Wolcott Gibbs Memorial Laboratory which was interrupted by the winter was recommenced early in the spring, and the building is rapidly nearing completion, so that it will be ready for occupancy by January 1.

The plans of the Division of Chemistry for a group of new buildings devoted to chemistry were furthered by the gift of \$50,000, later increased to not exceeding \$60,000, by T. Jefferson Coolidge, '50, to build a laboratory in memory of his son, T. Jefferson Coolidge, Jr., '84. The building will be called the T. Jefferson Coolidge, Jr., Memorial Laboratory. It will be located on Divinity Avenue, near the Wolcott Gibbs Memorial Laboratory, and will resemble the latter building closely in exterior appearance. The new laboratory will be devoted to quantitative analysis, and will contain, besides a lecture room, three class laboratories and six small private laboratories with balance rooms. The foundations have been laid and it is hoped that the walls and roof will be completed before winter, so that the building may be ready for use in September, 1913.

ARTHUR B. LAMB, *Director*.

## JEFFERSON PHYSICAL LABORATORY

TO THE PRESIDENT OF THE UNIVERSITY: —

SIR, — The members of the teaching staff have all been actively engaged in research during the last year. The results of their labors will be found in the appropriate volume of the Contributions from this Laboratory.

Among the graduate students, Mr. Sawtelle has brought a long and difficult piece of work to a successful conclusion. Mr. Royster and Mr. Trueblood have continued their researches in Heat. Mr. Swan has concluded his research in Sound. Mr. Webster has continued his study of the Absorption of Light. Mr. Clark has begun a research in Magnetism, and Mr. Chamberlin has done work on Vacuum Tube Rectifiers for Alternating Currents. Mr. Yabu and Mr. Maddox, students in the Graduate School of Applied Science, have carried on work in Wireless Telegraphy under Professor G. W. Pierce.

This year, the Cutting Fellowship was awarded to Mr. H. M. Trueblood.

Following the policy of Professor Trowbridge, graduate students engaged in research have been allowed free access to the building during the evening and on holidays. At such times, the janitors are not on duty. The risk from fire is increased by the policy. It is hoped that the sprinkler system which has recently been installed will tend to minimize this risk.

The overcrowding from which the elementary laboratories and the class-rooms continue to suffer is chiefly felt because of the lack of ventilation. Owing to the very substantial construction of the building, which makes all changes difficult, the evil cannot be easily remedied.

In conclusion, the Director must repeat his statement of last year: the endowment fund is inadequate for the present needs of the Laboratory.

THEODORE LYMAN, *Director*.

## PSYCHOLOGICAL LABORATORY

TO THE PRESIDENT OF THE UNIVERSITY: —

SIR, — The year in the Psychological Laboratory was characterized by very eager research work carried on by advanced graduates who were all on the road to the Doctor's degree. A list of the investigations which absorbed the chief energy of the Laboratory may indicate the manifoldness of directions in which the psychological experiment is proceeding. Of problems which have essentially theoretical bearing, I may mention the following. Mr. I. L. Williamson studied the fluctuations of memory. The ability to reproduce material which has been learned appears to increase at first after the completion of the learning process by a non-conscious slow organization of the memory dispositions. This change after the learning was studied by a new method, through which the firmness of the memory connections can be established for any given time period. Mr. E. C. Tolman investigated the relations between memory and the feeling tones as they are produced by pleasant and unpleasant sounds, smells, and so on. Mr. P. Rowland tried to develop methods by which the intensity of the will impulse toward particular actions could be measured through the amount of mental resistance which it overcomes. This resistance was set by the known suggestive power of certain objects which demanded opposite actions. Mr. J. W. Bridges approached the field of the psychology of decision. The decisions of individuals vary as to their rapidity, their firmness, their constancy and so on, and the aim was to determine how far these characteristics in the act of decision are correlated to a large number of other mental functions of the personality. Mr. E. R. Riesen was engaged with the question which nowadays is much discussed in experimental psychology, the influence of similarity on the learning process. From studies with similar ideas, he was led to an inquiry into the mutual relations of similar motor processes. A painstaking research in the borderland of psychology and aesthetics was that of Mr. R. C. Givler, who investigated the psychophysical effects of the predominant speech elements of various poets. After an exact statistical analysis of the various consonants and vowels in a large number of English poets, arti-

ficially constructed combinations of sounds in rhythm were studied, with subtlest methods in their effect on the system of psychophysical reactions, in order to determine how far the speech elements contribute to the characteristic impressions of the various authors.

Among problems which besides their theoretical interest have a more or less direct relation to the field of applied psychology may be mentioned an investigation by Mr. H. S. Townsend on the psychophysical effect of conscious misstatements with special reference to the time relations of untrue answers by a witness. Another research which may be of consequence for questions of law was that of Mr. G. A. Feingold, who aimed toward the development of methods by which the degree of mental similarity in the impressions from imitations might be measured. In view of the legal uncertainty in determining the justified similarity of goods in the market it seems important to gain objective standards for the appearance of likeness. Mr. J. Elliott, after finishing a shorter investigation concerning reversals in localization of sound, turned to a broad research into the psychophysical conditions of handwriting. In contrast to the popular graphology, he began with exact experimental methods to trace the variations of characteristic elements of writing under a great variety of mental conditions. Miss A. B. Copeland studied under the point of view of vocational guidance the psychophysical tests with which individual differences may be quickly determined.

Besides these investigations in the field of human psychology which were carried on under my own guidance and that of Dr. Langfeld, research work of students in the field of animal psychology conducted by Professor Yerkes included the following. Mr. H. C. Bingham continued his experimental study of size and form perception in chickens. Mr. C. A. Coburn began a study of the transmission of certain mental traits in mice; attention was given especially to wildness, savageness, and certain peculiar vocal expressions.

Of investigations which instructors of the laboratory carried on themselves, Professor Yerkes, in coöperation with Professor J. B. Watson of Johns Hopkins University, completed his study on methods of studying vision in animals. In coöperation with certain other comparative psychologists he undertook a critical study of the maze method in order to effect standardization. He also conducted an experimental investigation concerning acquisition of habits by earth-worms and their relations to the nervous

system. Dr. Langfeld made investigations upon the process of suppression both of movements and ideas under both positive and negative instructions. My own experimental work, besides the above mentioned investigations carried on with students, was concerned with a development of experimental methods for the determination of the fitness of industrial workers. I tried to develop experimental methods by which, for instance, motormen of electric railways, employees in the telephone service, employees in the ship service, and so on, may be examined as to their mental suitability.

All the various introductory and training courses of the laboratory and the lecture courses, which also make use of the means of the Laboratory, were well attended. The elementary psychology course reached such a size that the largest hall in Emerson Hall proved insufficient. While the courses related to the Laboratory moved along the lines of work in previous years, as far as human psychology was concerned, some changes were introduced in the field of animal psychology. During the first half-year an introduction to comparative psychology was given as a lecture and demonstration course, and this was followed in the second half-year by a laboratory training course in animal psychology. It is planned that the lecture course prepare students for the laboratory training course and that it in turn fit them for advanced work in comparative psychology, either in thesis courses or in laboratory courses. When the plan which is now being developed is perfected, three full courses in comparative psychology will be offered, each year an introductory lecture course, one term, combined with a laboratory training course, one term; secondly, advanced comparative psychology, a thesis course, and thirdly, a research course in the psychological laboratory.

The equipment of the Laboratory has been supplemented in many respects, especially by a large number of devices which the able mechanic of the Laboratory, Mr. Thain, has worked out. The only difficulty with which the Laboratory has still to contend is the continuing lack of an ample fund for the independent publication of the students' work.

HUGO MÜNSTERBERG.

## THE OBSERVATORY

TO THE PRESIDENT OF THE UNIVERSITY:—

SIR, — The plan of work advocated in recent reports has been greatly improved and extended during the past year. When a method, which commends itself to other astronomers, has been developed, if it can be applied to a large number of objects, results of great value will be achieved. It is of the first importance that the accuracy of the measures shall not be diminished, but with this condition the value is often proportional to the number of objects observed. Examples of such researches are the Revised Draper Catalogue and the Durchmusterung of Selected Areas, described more in detail below. As increased efficiency is of great importance, many of the methods of "Scientific Management" can be applied to advantage. The continual requests for facts which can only be obtained from the Harvard photographs is evidence that these lines of work are approved by astronomers and no other observatory is prepared or inclined to supply this demand. A large number of investigations, some of them requiring several years for their completion, are now in progress here. Another important feature of our present work is the extensive coöperation with other observatories and astronomical associations, both in America and Europe.

The retirement of Professor Arthur Searle, at the age of seventy-five years, deprives the Observatory of an active and efficient officer after a service of forty-three years. His devotion of a quarter of a century of his life to the discussion and reduction of the zone  $-10^{\circ}$  to  $-14^{\circ}$  provides one of the largest contributions of America, to Astronomy. Fortunately, he has been enabled to see this great work practically completed.

The Observatory has suffered a serious loss by the death of Professor A. Lawrence Rotch, Director of the Blue Hill Meteorological Observatory. His friendly coöperation with this Observatory has prevented needless duplication of work and has filled seven volumes of our Annals. These investigations have done much to change Meteorology from the mere work of collecting routine observations to a living science giving us the laws of the atmosphere. His study of the upper air by means of kites and

balloons placed him in the front rank in these investigations. It is hoped that his wish, expressed in the Preface to Volume 20 of our *Annals*, for "the ultimate consolidation of the two institutions," may be fulfilled.

#### OBSERVATORY INSTRUMENTS

*East Equatorial.* — The observations with the 15-inch East Equatorial have been made by Professor O. C. Wendell, and have been of the same general character as in previous years. More than nine thousand photometric comparisons have been made, mainly with the polarizing photometer with achromatic prisms. A part of the measurements relate to stars of the Algol type, others to stars whose variability is small, or doubtful, this instrument permitting slight changes to be detected with certainty. 1,380 settings have been made on Nova Geminorum No. 2, and its comparison stars. A series of measurements, comprising 752 settings, has also been made on S Ursae Majoris while its light was diminishing. The observations of a selected list of Fourth Type stars have been continued, 368 settings having been made. The brightness of the nucleus of Brooks' Comet 1911c was observed on two nights. With a second photometer, adapted to the measure of adjacent objects, four eclipses of Jupiter's satellites have been observed, making 914 in all, and 224 settings have been made on  $\delta$  Orionis, suspected of variability. Other observations of a miscellaneous character have also been obtained.

*Meridian Circle.* — The work of this instrument may now be regarded as completed, except that the study of the proper motion of the stars in the zone  $-10^\circ$  to  $-14^\circ$  is still in progress. Two great investigations have been completed with it, the zone  $+50^\circ$  to  $+55^\circ$  containing 8,627 stars, and the zone  $-10^\circ$  to  $-14^\circ$  containing 8,337 stars. Each of these investigations occupied the time of an observer and corps of computers for more than twenty years. The results fill eleven of the quarto volumes of the *Annals*, and the expense in salaries alone was about a hundred thousand dollars in each case. The instrument is still in use for time observations. It is believed that its work could now be advantageously replaced by photography, and experiments are in progress here with that end in view. It certainly would not be wise to undertake any large investigation with it, in its present condition. Great improvement might be expected by the application to it of methods recently devised.



## HENRY DRAPER MEMORIAL

The number of photographs taken with the 11-inch Draper Telescope is 28, making 18,358 in all; with the 8-inch Draper Telescope, 713, making the total number 38,015. The total number of stellar photographs taken here during the year is 4,155. The first of these instruments has been mounted at Mandeville, Jamaica, where it has been in regular use by Professor W. H. Pickering, mainly in a study of the changes in the surface of the Moon, and in the ellipticity of Jupiter's Satellites. The atmospheric conditions there appear to be exceptionally good both as regards clearness and steadiness of the air.

Miss Cannon has been appointed Curator of Astronomical Photographs in the place of the late Mrs. Fleming. From an examination of the spectra she has found four faint stars in which the line  $H\beta$  is bright, and twelve stars whose spectra are composite. The most important work she has undertaken, and one of the largest attempted by this Observatory, is the formation of a Revised Draper Catalogue. This work will include the class of spectrum, the photometric magnitude and the photographic magnitude of more than a hundred thousand stars distributed over the entire sky. As a basis for this catalogue Miss Cannon is classifying five thousand stars a month and has now classified 50,024.

The new star in Gemini afforded an excellent example of the value of our collection of photographs. Two plates taken of the region on March 10, 1912, showed no sign of the star, which appeared at nearly full brightness on two plates taken March 11; on March 12 it was discovered in Norway, and a photograph of its spectrum on March 13 showed that it closely resembled an ordinary star; on March 14 bright lines appeared in its spectrum, and on March 17 the spectrum had entirely changed, and become like those of other Novae.

## BOYDEN DEPARTMENT

The Arequipa Station has continued under the charge of Mr. Leon Campbell. The cloudy weather has seriously interfered with the work, although the conditions have greatly improved, and it seems probable that we shall again have the clear weather of former years. The number of photographs taken with the 13-inch Boyden Telescope is 29, making 12,988 in all; 792 photographs have been taken with the 8-inch Bache Telescope, making 43,528

in all. The total number of stellar photographs taken at the station during the year was 2,141. In coöperation with the Smithsonian Institution, a pyrhelimeter was mounted at Arequipa, on August 13, 1912, and during 49 days preceding October 1, 1,584 readings were obtained, on 38 days.

#### BRUCE PHOTOGRAPHIC TELESCOPE

The number of photographs taken with the 24-inch Bruce Telescope was 105, making a total of 10,614, in all. Photographs have been obtained of several of the Selected Areas of Kapteyn. Of the 24 equatorial and 118 southern regions, all have now been taken but 30, of which 10 are equatorial, and 20 are southern.

#### BLUE HILL METEOROLOGICAL OBSERVATORY

Professor A. Lawrence Rotch, the Founder and Director of the Observatory, died on April 7, 1912. Beginning in 1885, by the most assiduous effort, he built up and brought the Observatory to its present important position in the field of meteorology. Until its formal transfer to the University of Harvard is effected, the Observatory is being maintained and supported by Mrs. Rotch.

The regular observations and records were continued at the Observatory and at its lower station, and the weather forecasts were displayed at the gate daily. The upper air research was continued and kite-flights were made on twelve days named by the International Commission for Scientific Aeronautics, to a mean maximum altitude of 5,990 feet. The maximum altitude attained by the meteorograph in any flight was 10,615 feet. In July and August, Mr. E. G. Linsley, a student in Geology 20f, secured, during fogs, eighteen aerological records by means of kites flown from a motor-boat at Seal Harbor, Maine, as a part of a research on fog commenced during the winter. Mr. L. A. Wells continued as observer-in-charge. Mr. A. H. Palmer was succeeded by Mr. C. F. Brooks as research assistant.

#### MISCELLANEOUS

*Needs of the Observatory.*—The needs of the Observatory remain the same as in former years. The greatest need is provision for a number of computers to utilize the vast amount of material contained in the Harvard collection of photographs. It may be compared to a library of two hundred thousand volumes with only a dozen readers. Five thousand dollars a year, or any

portion of this sum, could be expended to great advantage in this way, and would yield results wholly out of proportion to its amount. This is well illustrated by the acceptable gift of Mr. George R. Agassiz, who supplied the means for employing two additional assistants. Fireproof buildings are also greatly needed to contain the Library and additional photographs. The sum of thirty thousand dollars would be sufficient for this purpose.

*Variable Stars.*—The organization for the observation of variable stars has greatly increased during the past year. Photographic maps have now been prepared of 582 variable stars, and the magnitudes of a sequence of comparison stars for each have been determined on a uniform scale. It thus becomes easy to estimate directly the brightness of these variables. As a result, 8,443 observations have been received as follows: Amherst College Observatory, 1,276; Mr. M. W. Jacobs, Jr., Harrisburg, Pa., 1,163; Dr. E. Gray, Eldridge, Cal., 998; Mr. W. T. Olcott, Norwich, Conn., 995; Mount Holyoke College Observatory, 787; Mr. J. B. Lacchini, Firenze, Italy, 610; Vassar College Observatory, 468; Mr. E. L. Forsyth, Needles, Cal., 342; Mr. H. W. Vrooman, Kokomo, Indiana, 318; Rev. T. C. H. Bouton, Hudson, N. H., 256; Mr. A. P. C. Craig, Corona, Cal., 229; Miss H. M. Swartz, South Norwalk, Conn., 188; Mr. F. E. Hathorn, Des Moines, Iowa, 182; Mr. S. C. Hunter, New Rochelle, N. Y., 159; Mr. H. C. Bancroft, West Collingswood, N. J., 130; Mr. C. Y. McAteer, Pittsburgh, Pa., 129; Dr. E. Padova, Catania, Italy, 104; Mr. W. P. Hoge, Pasadena, Cal., 56; Mr. W. N. Bixby, Cambridge, Mass., 22; Mr. E. A. Perkins, Lynn, Mass., 21; and Mr. T. Dunham, Jr., Northeast Harbor, Maine, 10.

All those sending their observations here early in each month are mentioned in a series of articles sent to *Popular Astronomy* showing the brightness of each variable. The observations will also be published in the *Annals of the Observatory*, if they have not been printed elsewhere. In addition to the observations mentioned above, 1,332 were made here, comprising 1,082 by Mr. P. G. O'Reilly, 210 by Miss I. E. Woods, and 40 by Miss M. Harwood. 342 observations were made at Arequipa, by Mr. L. Campbell. The total number is, therefore, 10,117. The important aims are to secure observations, at short intervals, of the principal variables of long period, and to obtain useful results from large numbers of owners of small telescopes whose work, otherwise, might be but of little value. Both of these conditions seem now to be fulfilled in a highly satisfactory manner.

*Observatory of the Rev. J. H. Metcalf.* — 209 photographs have been taken by Mr. Metcalf and his assistant, with the 12-inch and 6-inch Telescopes, with an average exposure of 70 minutes. The total number of photographs to October 1, 1912, is 1,362. More than a hundred observations of asteroids have been made. Several new ones were found, three of which had their orbits computed by the Rechen Institute of Berlin. One of these proved to be an old asteroid, which had been lost. The other two were new. A zone for following asteroids has been assigned to Mr. Metcalf by the Rechen Institute. Observations in it are now in progress.

The 16-inch Metcalf Telescope has continued in regular use in Cambridge. 720 photographs have been taken, making the total number 2,017. All of the 110 Selected Areas of Kapteyn, north of the Equator, have been photographed except nine, seven systematic, and two special, regions. The determination of the position of the Moon by photography has now become a part of the regular routine work of this instrument. 183 photographs have been taken, making 289 in all. Plans have been completed for the regular measurement and discussion of these plates under the direction of Professor Russell of Princeton.

*Additional Investigations.* — The total number of unpublished investigations now in progress exceeds forty. Perhaps the most important of these is the determination of the photographic magnitude of the stars on a uniform scale. Miss Leavitt is still continuing the study of a sequence of stars near the North Pole. By the courtesy of the Director of the Mount Wilson Observatory, photographs taken with the 60-inch Telescope have enabled us to extend this work to stars fainter than the twentieth magnitude. This scale is also being transferred to the forty-nine other regions distributed over the sky and including one near the South Pole. The possibility of determining the photographic magnitudes and colors of stars on a uniform scale with an accuracy equal to that of photometric magnitudes, now seems within our reach.

Another research of the greatest importance is the measurement by Professor Kapteyn of all the stars in his Selected Areas. Photographs of the southern regions were taken with the 24-inch Bruce Telescope in Arequipa, those of the northern regions, with the 16-inch Metcalf Telescope in Cambridge. Measures have been made in Groningen of the diameters and positions of 181,497 stars on these photographs. Plans have been completed for the publication of these measurements in our *Annals* as soon as a satisfactory method has been found for reducing the diameters

to photographic magnitudes. It is expected that the total number of stars will be about 300,000, and that they will fill five volumes of our *Annals*.

*Library.* — The Library of the Observatory has been increased by 294 volumes and 1,462 pamphlets, making the total number, 13,824 volumes and 32,734 pamphlets. It is scattered through the various rooms of the Observatory, and continues in constant danger of destruction by fire.

*Telegraphic Announcements.* — Thirty-two telegraphic announcements have been made, mainly relating to the discovery and observation of comets. They are sent to all who wish for them, free of expense beyond that charged in each case by the telegraph company. The messages are generally sent by "Night Letter," and can thus be transmitted in ordinary language, instead of in cipher, without increased expense, and generally without serious delay.

Cablegrams intended for this Observatory should be addressed "Observatory, Boston," and all telegrams "Harvard College Observatory, Cambridge, Mass." All correspondence should be addressed to the Director.

Thirty-five bulletins have been issued, making the total number 501. The bulletins, beginning with No. 501, are now printed, instead of neostyled, with a great improvement in their appearance and legibility, and but little, if any, loss of time. Many interesting facts are communicated to us and are thus distributed without additional charge to those receiving the telegrams. An example of the promptness with which facts of astronomical importance are now made known throughout the world is afforded by the New Star in Gemini which appeared last spring. Although it was first seen in Norway, observations were obtained of it here and at other American observatories the following evening.

*Publications.* — A large part of the work of this Observatory is devoted to the publication of results in its *Annals*. During the last year Volumes 47, Part 2; 56, Nos. 6 and 7; 59, Nos. 9 and 10; 61, Part 3; 63, Part 1; 71, No. 2; 72, Nos. 1, 2, and 3, have been distributed; 56, No. 8, Comparison of Objective Prism and Slit Spectrograms, is nearly ready for the printer; 63, Part 2, Sequences of Comparison Stars for 285 Variables, is in preparation; 64, No. 8, Basis of Meridian Photometric Magnitudes, is ready for printing; 67, Catalogue of 8,337 Stars in the Zone  $-9^{\circ} 50'$  to  $-14^{\circ} 10'$ , is completed, and will be distributed as soon as it reaches the Observatory; 71, No. 3, Standard North Polar Sequence, is

nearly ready for the printer; 72, No. 4, Observations with the Rumford Photometer, is partly printed; 72, No. 5, Light Curves of Eros and other Asteroids, has been sent to the printer; 73, Part 1, Blue Hill Meteorological Observatory, 1909, is in process of publication and 35 pages are in type; 74, General Catalogue of Faint Stars, is about one third in type; 75, Bond Zones of Faint Equatorial Stars, is nearly all in type. A quarto pamphlet of thirty-six pages, giving the contents of the Annals, 1 to 73, has been distributed, together with a plan for the sale of these volumes at cost. The set of Annals, from 1 to 70, is therefore completed and distributed with the exception of 56, No. 8; 63, Part 2; 64, No. 8, and 69, Part 2. Portions of 71 and 72 have also been distributed.

From a comparison with previous reports it will be seen that good progress has been made in filling the gaps in the series of Annals, and it is expected that further progress will be made during the coming year.

Ten Circulars have been issued whose numbers, titles, and dates are as follows: —

- 167. Stars having Peculiar Spectra. 31 New Variable Stars. September 20, 1911.
- 168. The Variable Star, 232848, Z Andromedae. November 10, 1911.
- 169. Photometric Observations of Asteroids. December 14, 1911.
- 170. Adopted Photographic Magnitudes of 96 Polar Stars. February 21, 1912.
- 171. Five Variable Stars having Secondary Minima. February 21, 1912.
- 172. Photographic Magnitudes of Asteroids. February 22, 1912.
- 173. Periods of 25 Variable Stars in the Small Magellanic Cloud. March 3, 1912.
- 174. Variability of the Pole Star. April 8, 1912.
- 175. Photometric Measurements of Nova Geminorum, No. 2. July 16, 1912.
- 176. Nova Geminorum, No. 2. July 29, 1912.

Various other publications by officers of the Observatory are described in the *Harvard University Gazette*, each month.

EDWARD C. PICKERING, *Director*.

## MUSEUM OF COMPARATIVE ZOOLOGY

TO THE PRESIDENT OF THE UNIVERSITY:—

SIR, — During the academic year 1911-12 nineteen courses were given to two hundred and sixty-three students in Harvard University.

Two of these courses were given by the German Exchange Professor, Dr. Willy Kükenthal of Breslau, and were taken by one hundred and forty-one students.

The instruction in the other courses was given by Professors Mark, Parker, Wheeler, Castle, Rand, East, and Mr. Brues.

The Assistants in these courses were Messrs. C. T. Brues, D. W. Davis, T. R. Goethals, A. O. Gross, S. I. Kornhauser, Jonathan Risser, R. A. Spaeth, and P. W. Whiting.

The Virginia Barret Gibbs Scholarship was held by Mr. James W. Mavor. The income of the Humboldt Fund aided five students, three at the Bermuda Station for Research, and two at the Laboratory of the U. S. Bureau of Fisheries at Woods Hole.

The instruction in Radcliffe was given by Professors Mark and Rand, and Mr. D. W. Davis.

Five courses were given to thirty-four students.

The number of courses and of students in 1910-11 was:—*Harvard*, twenty courses, two hundred and fifty-four students; *Radcliffe*, five courses, thirty-five students.

The instruction in the Department of Geology and Geography was given by Professors Rotch, Ward, Woodworth, Johnson, and Raymond and Dr. Lahee, assisted by Messrs. D. C. Barton, W. P. Haynes, E. G. Linsley, and Edward Wigglesworth. Dr. Lahee also served as Assistant to Professor Woodworth in one course.

Seventeen courses were taken by two hundred and sixty-eight students in Harvard University and three courses were taken by twenty-three students of Radcliffe College.

The income of the Josiah Dwight Whitney Scholarship Fund was used to aid two students in their geological and geographical work in the Rocky Mountain region.

In 1910-11 the number of courses and of students was:—*Harvard*, seventeen courses, three hundred and fifteen students; *Radcliffe*, six courses, twenty-one students.

The resignation of Professor William M. Davis as Sturgis Hooper Professor of Geology will not, it is hoped, deprive his Museum associates of his wise and critical counsel, while Professor Reginald A. Daly's appointment as Professor Davis's successor is an assurance that the high ideals of the Sturgis Hooper professorship will be maintained.

The title of the officers in charge of the collections was changed, by vote of the Museum Faculty, from Assistant to Curator; following this change the Corporation appointed the former Curator of the Museum, Director.

Two additions have been made to the working staff of the Museum, namely, Dr. Percy E. Raymond as Curator of Invertebrate Palaeontology, and Dr. Thomas Barbour as Associate Curator of Reptiles and Amphibians. Dr. Raymond has also been appointed Assistant Professor of Palaeontology in the University. It is anticipated that Professor Raymond's appointments will be of mutual advantage. His previous service with the Carnegie Museum, Pittsburgh, and more recently with the Geological Survey of Canada, together with the resources of the collection and library of this Museum, should attract students. Recent reports of the Museum give ample evidence of Dr. Barbour's interest in the work of the Museum.

On the 28th of May, 1912, Dr. William McM. Woodworth of the Museum staff died in Cambridge. Dr. Woodworth graduated from Harvard in 1888. Appointed in 1889 Assistant in Microscopical Anatomy in the University, he held various offices in the University and the Museum and served continuously from the date of his first appointment until his death. As a privileged Assistant, Dr. Woodworth accompanied Mr. Agassiz on most of his expeditions to the tropics, and thus enjoyed advantages unusual for a zoölogist. A skilled technician and an intelligent collector of books, Dr. Woodworth, by his will, bequeathed to the Museum a number of zoölogical books and pamphlets, a collection of specimens, an especially valuable series of works relating to the South Seas, and also many desirable instruments.

Through the generosity of Mr. George R. Agassiz, fifty thousand dollars (\$50,000) has been added to the permanent funds, the income available for the general use of the Museum.

For monetary gifts applicable for the acquisition of desirable material or for the expenses attendant on collecting the same, acknowledgment is due Miss A. A. Sprague, Mrs. Mary L. Russell, Mrs. Louis A. Shaw, and Messrs. Thomas Barbour, C. L. Hay, E. C. Lee, J. C. Phillips, and J. E. Thayer.



As in previous years, valuable specimens of mammals and birds have been added this year to the collections of the Museum through the generosity of Mr. John E. Thayer. A number of Birds-of-Paradise, some of marked beauty, are among Mr. Thayer's gifts.

To Dr. J. C. Phillips the Museum is indebted for a large series of skulls, horns, and antlers of mammals, mostly game ungulates. Many of these were new to the Museum collections. Dr. Phillips has also presented very many skins of pheasants and ducks, both terms used in their widest significance, and many of the species of these two important groups of birds included in Dr. Phillips's gift were also not well represented in the collection. It is to Dr. Phillips's liberality that the Museum owes the services of its second Preparator. In addition to the above gifts Dr. Phillips was instrumental in securing for the Museum the Bryant-Palmer collection of Javan birds and mammals. This collection contains nearly one thousand skins of birds, more than one hundred of which were not represented previously in the collection of the Museum. The Bryant-Palmer accession contains also a few nests and eggs of birds and several hundred mammals, skins and skulls.

Mr. L. J. de G. de Milhau has been good enough to continue his gift of Icelandic birds, and to Dr. S. B. Wolbach the Museum owes several mammals, birds, reptiles, and arachnids obtained while he was attached to the expedition of the Liverpool School of Tropical Medicine to the Gambia in 1911.

Col. John Caswell has sent to the Museum a few mounted birds and a number of mounted heads of African ungulates. Some of the latter, the Giraffe, Rhinoceros, and Hippopotamus, make a notable addition to the series of heads and horns on exhibition in the Divinity Avenue entrance hall.

There are many specimens of scientific interest among the skeletons, skulls, and casts of bones of vertebrates contained in the kind gift of Dr. R. T. Jackson.

The Museum is indebted to Messrs. J. H. Emerton and R. V. Chamberlin for the type specimens of new species of Araneida and of Myriopoda described by them.

From Dr. P. P. Calvert and Mr. E. B. Williamson the Museum has received a large number of Odonata; many of these are new to the collection and all are most desirable as representing especially rare forms or such as extend the distribution of the species as shown by the Museum collection.

To the U. S. Bureau of Fisheries the Museum is under obligations for two large series of marine invertebrates, both collected during cruises of the "Albatross." One of these collections, the schizopods, obtained during the 1899-1900 and the 1904-05 expeditions, has been in the hands of Dr. H. J. Hansen of Copenhagen. His report forms number 4 of Volume 35 of the Memoirs of the Museum. This collection was received in Cambridge in perfect condition and its value is very much enhanced by Dr. Hansen's careful and exact labelling. The labelling of similar collections is too frequently done in a purely mechanical way by inexperienced hands and is consequently without the authority that original material should have. The second accession, the gift of the Bureau, is the series of Hydromedusae, Scyphomedusae, siphonophores and ctenophores collected by the "Albatross" during 1904-05 and 1906; the reports on the scientific results obtained from these collections have been prepared by Dr. Bigelow.

The Museum is also indebted to Miss H. E. Hooker and to Messrs. W. L. Allen, Henry Hales, A. H. Higginson, and Harry W. Smith for additions to the collection of domestic animals; to Yale University, through Professor Charles Schuchert, for a set of casts of a Pteranodon, and to Mrs. Walter Channing, for some interesting birds.

The thanks of the Museum are due Messrs. Faxon, Brewster, Bangs, Bigelow, and Sayles for their interest in the collections entrusted to their care, and also to Dr. Thomas Barbour, who makes his first report as Associate Curator of Reptiles and Amphibians.

The Museum collections benefit each year from the visits of specialists. Two noteworthy instances during the year may be mentioned. Dr. Kükenthal studied critically a large part of the alcyonarian corals, and received as a loan for a detailed examination at his convenience a small series of foetal whales and sirenians. Dr. Carlos de la Torre has added very many rare and desirable Cuban species of vertebrates and invertebrates to the collection, and the Museum is especially indebted to him for a thorough and critical revision of a very large part of its Cuban land shells. Dr. de la Torre's exact knowledge of the Cuban Pulmonifera and his personal relations with earlier students of West Indian Mollusca enabled him to disentangle many doubtful points of identification and of nomenclature.

The collection of Araneida has been increased in size and improved scientifically by the voluntary work of Miss E. B. Bryant

Field work carried on during the year has contributed a large amount of valuable material. This work may be briefly summarized:—

Mr. W. P. Haynes spent a week searching for fossil insects in the Carboniferous area in the vicinity of Pawtucket, R. I. A cursory examination of the material secured shows that plants, crustaceans, and some tracks, possibly amphibian, were collected; also a few fragmentary specimens that more careful study may prove to be the wings of insects. While in the Rocky Mountain region of Montana, Mr. Haynes also collected a large series of Cambrian, Devonian, and Carboniferous invertebrates. This collection was made mainly in the vicinity of Three Forks; it is as yet unstudied.

By the courtesy of the Hon. G. M. Bowers, U. S. Commissioner of Fisheries, the U. S. F. C. Schooner "Grampus" was placed at Dr. H. B. Bigelow's disposal during July and August. Accompanied by Messrs. W. W. Welsh and H. E. Metcalf as Assistants, Dr. Bigelow undertook a partial survey of the Gulf of Maine. Forty-six off-shore stations were occupied and a large number of interesting observations relative to temperatures, salinities, currents, and plankton were made; these will form the basis for a detailed report. With the coöperation of Professor J. S. Kingsley, a week was devoted to trawling in Casco Bay and vicinity, but with this exception little attention was given to work with the trawl or dredge. The collections obtained by the "Grampus," though rich in a few groups, were not large.

In two short trips, one to George's Bank and a second to eastern and northern Maine, Mr. W. F. Clapp secured enormous series of shells. The series from George's is estimated at 20,000 specimens and that from Maine at 50,000. Some of the species collected by Mr. Clapp are most desirable additions to the collection, and very many of the others provide specimens for advantageous exchanges. Mr. Clapp's trip to George's was made on the trawler "Crest," Captain Green, through the courtesy of the Bay State Fish Company.

Dr. Thomas Barbour worked in western and central Cuba for about two months, January–March, 1912; he secured a large number of new and little-known reptiles and amphibians as well as other interesting vertebrates and invertebrates. He received much kind assistance from Dr. Carlos de la Torre and Messrs. R. M. Grey, Victor Rodriguez, and Jesus Valdivia.

Dr. H. L. Clark, at the kind invitation of Dr. A. G. Mayer of the Marine Biological Department of the Carnegie Institution, Washington, spent six weeks, February and March, 1912, at Montego Bay, Jamaica. While there he collected fifty-seven species of echinoderms, many of them in considerable series; he also preserved a large amount of material that will aid in tracing the history of the postlarval development of the brittle-stars.

With the kind assent of Mr. Clarence L. Hay, Mr. J. L. Peters accompanied the 1910-11 Central American expedition of the Peabody Museum. Working in extreme southern Mexico along the border of British Honduras, Mr. Peters collected many desirable reptiles, birds, and mammals.

During the year Mr. George Nelson of the Museum staff made two trips to the Swan Islands, Caribbean Sea, spending about eight weeks collecting on the two islands. Mr. Nelson secured what is probably a complete series of reptiles, resident birds, and mammals, together with some of the more conspicuous terrestrial invertebrates.

Professor Theodore Lyman left Cambridge late in May for a short trip to the Altai Mountains. He was accompanied by Mr. N. Hollister of the U. S. National Museum. Professor Lyman arranged that the scientific results of his trip should be shared by the U. S. National Museum and the Museum of Comparative Zoölogy. This Museum will receive the birds collected, the U. S. National Museum the mammals. After the publication of the reports, the material will be divided between the two Museums.

The reports of the Curators give the details of the work and of the additions received in the several departments during the year.

Mr. George Nelson's collecting trips to the Swan Islands have been mentioned already. His work at the Museum has been directed chiefly toward the improvement of the exhibition collections of vertebrates. He has mounted a number of recent reptiles, birds, and mammals, among the last a specimen of Père David's Milou Deer, *Elaphurus davidianus*; he has completed the remounting of the mammalian skeletons, with the exception of the largest specimens, and has also remounted many skeletons of birds. His time is not infrequently given up to photographic work, either for the illustration of Museum publications or in answer to the requests of scientific institutions and investigators.

Mr. W. R. Zappey has mounted a number of birds and mammals for exhibition; the more noteworthy of the latter are: — a male

Impala, *Aepyceros melampus suava*, from Guaso Nyiro, British East Africa, a gift of Dr. William Lord Smith, and an East Tibetan Serow, *Capricornis sumatrensis milne edwardsi*, shot by Mr. Zappey at Tachienlu, and a gift to the Museum from Mr. J. E. Thayer. Mr. Zappey has also accomplished in a most satisfactory way a large amount of taxidermic drudgery.

Since April, 1912, Mr. J. D. Sornborger has worked conscientiously upon the osteological specimens received in recent years.

As for several years assistance in addition to the Museum staff has been employed, from time to time, for the care and development of the research collections. Dr. G. M. Allen, as in recent years, has worked for three days of each week upon the collection of mammals. He has completed a revision of the collection of skins; with the exception of a few recent accessions, the entire series is arranged and card catalogued. Dr. Allen has also begun the incorporation of the fossil Mammalia with the osteological specimens of recent forms.

Mr. W. F. Clapp's work upon the Mollusca has been confined in large part to the North American Pulmonifera, and to such aid as he could give Dr. de la Torre in the revision of the Cuban land shells. Mr. Clapp's great success in collecting has been referred to.

Since October, 1911, Miss Elvira Wood has worked upon the collection of fossil crinoids. This collection, with the exception of the Camerata, has been rearranged according to the 1900 English translation of Zittel; the classification of Wachsmuth and Springer has been used for the Camerata. With the rearrangement, the work of identification, verification of previous identifications, and the relabelling of the specimens has been effected. Many specimens have been developed, and others repaired. All the types and figured specimens have been compared with the original descriptions and figures, and catalogued.

Three new cases have been built in the exhibition halls and the many new accessions to the research collections have necessitated additional cases for the collections of echinoderms, insects, and birds. In two of the new cases in the gallery devoted to the North American fauna, the invertebrates and lower vertebrates have been rearranged. The improved methods of mounting fishes for exhibition have been very marked during recent years. With due care these methods prove satisfactory for large and medium sized specimens, but have failed hitherto for small fishes. Recently, however, Mr. Nelson has mounted specimens of the Redside

Darter, *Boleichthys fusiformis*, less than two inches in length, which are in all respects masterly pieces of taxidermy, by far the finest mounted fishes in the Museum.

By purchase the Museum has acquired the W. G. Dietz collection of Microlepidoptera. This collection is rich in types, in series of specimens, and in specimens of recently described species new to the Museum. With the Chambers and Zeller material, the Dietz collection makes the Museum series of Palaearctic and Nearctic forms a large and important one.

The Library consists of 49,155 volumes and 45,535 pamphlets; 1,136 volumes and 1,093 pamphlets have been added during the year.

The publications for the year include seven numbers of the Memoirs, thirteen numbers of the Bulletin, and the Annual Report, a total of 1,229 (907 quarto, 322 octavo) pages, and 156 (133 quarto, 23 octavo) plates. One number of the Bulletin contains the third annual report of the Harvard Seismographic Station, and four numbers contain Contributions from the Zoological Laboratory. Three numbers of the Bulletin and six numbers of the Memoirs contain Reports on the scientific results of the expeditions carried on under Mr. Agassiz's direction, and five numbers of the Bulletin and one number of the Memoirs represent work based upon Museum collections.

The Corporation has granted, as in recent years, the sum of \$350, to assist in the publication of contributions from the Zoological and Geological Laboratories.

By vote of the Corporation (13 November, 1911), "the buildings of the Museum of Comparative Zoology" will be known hereafter as Agassiz Hall.

SAMUEL HENSHAW, *Director*.

## THE ZOÖLOGICAL LABORATORY

TO THE PRESIDENT OF THE UNIVERSITY:—

SIR, — The Department of Zoölogy was favored during the past year by the presence of the German Exchange Professor selected for 1911-12, — Doctor Willy Kükenthal, Professor of Zoölogy and Director of the Zoölogical Museum at the University of Breslau. His term of service at Harvard fell in the first half-year, during which time he conducted, in German, one course for advanced students, and gave in English the lectures in the elementary course on general zoölogy. With this exception, and the changes due to alternation of certain courses in successive years, the courses in zoölogy were substantially the same as in 1910-11.

The tables which follow show the number of students in each of the several classes who were enrolled in the zoölogical courses during the year 1911-12, — the first for students in Harvard University, the second for students in Radcliffe College.

TABLE I

Courses 1911-12	Graduate		Senior	Junior	Soph.	Fresh.	Special	Uncl.	Total
	A. & S.	Ap. Sci.							
Zoölogy 1	3	...	8	19	36	65	3	4	138
" 2	3	...	5	6	11	3	1	...	29
" 3	1	...	5	5	1	1	...	1	14
" 4	1	...	3	3	1	1	...	1	10
" 5b	2	1	3	...	1	...	...	1	8
" 7a	1	1	...	...	...	...	...	...	2
" 7b	1	1	...	...	...	...	...	...	2
" 7c	...	...	2	...	...	...	...	...	2*
" 7d	...	5	...	...	...	...	1	...	6*
" 11	4	2	4	2	1	1	...	...	14
" 12	2	1	...	1	...	...	...	...	4
" 14a	3	1	2	2	1	...	...	1	10
" 17	2	...	...	...	...	...	...	...	2
" 19	2	...	1	...	...	...	...	...	3
" 20a, b	4	...	...	...	...	...	...	...	4
" 20c	4	...	...	...	...	...	...	...	4
" 20d	...	5	...	...	...	...	...	...	5
" 20f	...	5	...	...	...	...	...	...	5*
" 20g	1	...	...	...	...	...	...	...	1
Sums ..	34	22	33	38	52	71	5	8	263

\* These numbers include students enrolled in the summer courses.

TABLE II

Courses 1911-12	Gr.	Senior	Junior	Soph.	Fresh.	Special	Total
Zoölogy 1 . . . . .	. . .	1	6	2	12	2	23
" 2 . . . . .	1	. . .	. . .	2	2	. . .	5
" 4 . . . . .	. . .	. . .	1	. . .	. . .	1	2
" 5b . . . . .	2	. . .	. . .	. . .	. . .	1	3
" 14a . . . . .	. . .	. . .	. . .	. . .	. . .	1	1
Sums . . . . .	3	1	7	4	14	5	34

Nineteen students (nine registered in the Graduate School of Arts and Sciences and ten in the Graduate School of Applied Science) were enrolled in courses of research, four each under supervision of Professors Mark and Parker, five each under Professors Wheeler and Castle, and one under Assistant Professor Rand.

Two of these, named below, completed the requirements for the degree of Doctor of Philosophy, which was conferred on them in June. The thesis of Alfred O. Gross was entitled "The Reactions of Arthropods to Monochromatic Lights of Equal Intensities," and that of Sidney I. Kornhauser, "A Comparative Study of the Chromosomes in the Spermatogenesis of *Enchenopa binotata* (Say) and *Enchenopa* (*Campylenchia* Stål) *curvata* (Fabr.)." The thesis of Donald W. Davis, entitled "Asexual Multiplication and Regeneration in *Sagartia luciae* Verrill," was approved, and Mr. Davis will come up later for his final examination. Mr. Samuel C. Palmer, whose thesis was mentioned in the last report, received the degree of Ph.D. at mid-year.

Three students were granted aid from the income of the Humboldt Fund to the amount of \$205.71 while carrying on work at the Bermuda Biological Station, and two to the amount of \$61.71 while working at Woods Hole.

The Bermuda Biological Station was open from June 24 till August 10. Of the four persons enrolled, three were connected with Harvard University. Two numbers of the Contributions from the Station were published during the year.

In November Professor Kükenthal presented before the National Academy of Science, as guest at its meeting in New York City, a paper subsequently published as one (No. 230) of the Contributions from the Zoölogical Laboratory.



In March Professor Parker read by invitation a paper entitled "Sensory Appropriation, as Illustrated by the Organs of Taste in Vertebrates" at the centennial celebration of the founding of the Philadelphia Academy of Natural Sciences, and in May he gave an address before the Biological Club of Trinity College, Hartford, on "The Nature of the Primitive Nervous System."

The Zoölogical Club held twenty-four meetings, at which twenty-two original papers and fourteen reviews were presented.

During the year forty-six zoölogical papers, including those in applied zoölogy, have been published. Their titles have been recorded in the *University Gazette* and in part in the Report of the Director of the Museum of Comparative Zoölogy.

EDWARD L. MARK, *Director.*

## MINERALOGICAL MUSEUM AND LABORATORIES OF MINERALOGY AND PETROGRAPHY

TO THE PRESIDENT OF THE UNIVERSITY:—

SIR,— Besides the addition of individual specimens from various sources the Museum has been enabled to do its own collecting on a large scale through the generosity of Mr. Albert F. Holden, Class of '88, who provided a considerable sum of money for that purpose. Accordingly Professor Palache visited last summer the localities of New Hampshire and Maine famous for their beryls, tourmalines, and a number of rarer minerals, and obtained a large amount of material for exhibition and research. Mr. Holden also gave a large New Hampshire beryl of great beauty and a huge celestite group from Ohio. Alfred Mosely, Esq., of London, obtained from the De Beers Mining Co. of Kimberley a valuable series illustrating the occurrence of the diamond. The Curator purchased a local mineral collection of some 600 specimens. Four new meteorites were given to that collection at a cost to the donor of \$1,000; two being representatives of recent daylight falls in the United States. The Curator visited the Corundum mines of Southern Ontario and the gold districts in the north of that province, obtaining some good material. He has described under the name, "Sheridanite," a new variety of the mineral chlorite, from Wyoming.

JOHN E. WOLFF, *Curator*.

## THE PEABODY MUSEUM OF AMERICAN ARCHAEOLOGY AND ETHNOLOGY

TO THE PRESIDENT OF THE UNIVERSITY:—

SIR, — The matter of greatest importance to the Museum at the present time is the success of the Committee appointed by the Corporation to secure the means for the completion of the University Museum building. When the money is obtained and the building is completed, the original plan of the Museum, made by Louis Agassiz fifty-three years ago, will have been carried out. The additional space to be provided is allotted to the Anthropological Section of the University Museum, and will give the long desired room for its further development. The plans provide for the addition to the Peabody Museum of five exhibition halls, each 100 by 60 feet, a stack room for the library, several much needed work rooms and offices, a photographic room, an elevator, and other conveniences.

During the past year the Museum has continued its explorations in several fields. Acting under the Committee for Central American Research, from January to June Mr. R. E. Merwin, Field Director of the Central American Expedition, Mr. C. L. Hay, Chief Assistant, and Mr. J. L. Peters, Zoölogist, were exploring the region north of the Hondo River, the boundary line between Yucatan and British Honduras. Several prehistoric Maya cities were discovered and many photographs were taken of ruins heretofore unknown. A thorough search was made for stelae and hieroglyphic inscriptions which seem to be very rare in the region explored. Mr. Merwin is now preparing a report on the expedition which will be published as a Museum Memoir.

Mr. A. V. Kidder, Austin Teaching Fellow, in continuation of his studies of the several culture groups of the ancient peoples of the pueblos and cliff dwellings of New Mexico, Colorado, Nevada, and Utah, visited about 100 ancient sites and secured much material for study, particularly in relation to the designs on the pottery. He also obtained a good collection of old pottery from the existing pueblos in New Mexico, and an important lot of objects from the cliff houses in the Navajo mountains.

Mr. F. H. Sterns, Hemenway Fellow, has been engaged in a study of the prehistoric sites in Douglas County, Nebraska.

These consist of more or less extended groups of earth circles and depressions covering an area of about seven square miles in Douglas County. There are other similar groups in Washington County and on the other side of the Missouri River in Iowa. The thorough exploration of three of these sites showed them to be ruins of rectangular habitations. Many objects of pottery, stone and bone were found and brought to the Museum for study. Mr. Sterns is preparing a map showing the distribution of these habitation sites which extend over this large area. In connection with Mr. R. F. Gilder of Omaha, Mr. Sterns explored one house site in Sarpy County where human bones were found. Mr. Gilder kindly added to the collection obtained for the Museum the collection of human bones and other objects he had previously found at this site.

Mr. S. J. Guernsey in continuation of his archaeological researches in the valley of Charles River has discovered several rock shelters, and three pits containing caches of stone implements. An interesting site on the grounds of the U. S. Arsenal was explored by the kind permission of the Commandant. The Metropolitan Park Commissioners also have shown their interest in these researches by granting permission to explore an Indian rock shelter on the park near Newton Lower Falls. There are many old Indian sites in the valley and the Museum solicits information of any that may be known or hereafter discovered, that the Indian occupation of the valley may be studied and the sites mapped. Information is also desired of the location of Indian village sites, shell heaps, or burial places in other parts of the state. Stone implements picked up on the surface will be welcome, as they are of interest in many ways and often indicate an ancient village site. Mr. Guernsey also found and examined three Indian burial places, two village sites, and several shell heaps at Martha's Vineyard.

Mr. Ernest Volk has continued the explorations in the Delaware Valley. Taking advantage of numerous excavations in the glacial gravels that have been made for foundations of buildings and by the Pennsylvania Railroad, as well as excavations in the bottom of the Delaware River itself, he has obtained interesting results both geological and archaeological. The Museum is indebted to the Duke of Loubat and Dr. Peabody for the means of carrying on this research.

Dr. Charles Peabody has been in Europe during a portion of the year, and he has made trips to certain archaeological sites in

England and on the Continent. He has secured by his own collecting, by gifts of friends, and by purchase, several collections for the division of European Archaeology of which he is in charge. One large and valuable collection, which he secured by purchase and presented to the Museum, is from the Cavern of Espéluques, Lourdes, France. This collection of stone and bone implements of various kinds includes many carved bones, and is a very important addition to our palaeolithic collection from Europe. Dr. Peabody represented the Museum and presented papers at the Anthropological Congresses held at London, Angoulême, Geneva, and Rome during the past summer. He was also an official delegate from the United States to the International Congress of Prehistoric Anthropology and Archaeology at Geneva.

Professor Henry Williamson Haynes, who died on February 16, 1912, was an early friend of the Museum. He was sincerely interested in its work and development and served on the Museum Visiting Committee from the time that committee was appointed by the Board of Overseers in 1890. By his will he bequeathed to the Museum his private collections of prehistoric archaeology and his books and pamphlets relating to archaeology and ethnology. Professor Haynes' collections were made by himself during his travels in Egypt, France, Switzerland, Italy, Greece, Austria, Hungary, Denmark, Sweden, England, and Ireland, as well as in various parts of our own country. It was Professor Haynes who first brought to this country a series of implements of palaeolithic forms from Egypt. These he secured in 1877 and described and illustrated in the *Memoirs of the American Academy of Arts and Sciences* in 1881. The only specimens in this country of the much discussed flints or "pseudo-eoliths" from Theney are also in the collection. His archaeological collecting trips in Europe began in 1873 and continued nearly to the time of his death. In August, 1911, he brought home the last specimens to be added to his already large museum which overflowed one good-sized room in his home. For several years Professor Haynes had given to the Museum fifty dollars annually for binding serials in the library. By his will he left \$1,000 as a fund, the income of which, by vote of the Museum Faculty, will be devoted to the same purpose.

From Mrs. N. E. Baylies the Museum has received one thousand dollars to be kept as a fund in memory of the late Francis C. Lowell, who was a Trustee of the Peabody Funds and later a member of the Faculty of the Museum.

The Museum has also received its portion of the income for the year of the bequest of Eliza O. and Mary P. Ropes to Harvard University.

For current expenses, for the purchase of books, repairs of the halls, and for special explorations, independent of the Central American Expeditions, there have been gifts amounting to \$2,435.63, which are recorded in the report of the Treasurer of the University.

The income of the Huntington Frothingham Wolcott Fund was applied to the purchase of several small lots of Indian objects and ethnological collections from British Guiana, Africa, and the Pacific Islands.

The income of the Henry C. Warren Fund for Explorations was used for several limited explorations in this country.

The income of the Susan C. Warren Fund was in part used for the construction of cases and in part for current expenses.

A portion of the income of the Mary Hemenway Fund for Archaeology was devoted to the salary of the Hemenway Assistant in Archaeology and for Mr. Kidder's researches in the pueblo region of the Southwest.

In addition to the collection received by the bequest of Professor Haynes, many important and, in several instances, unique specimens of great value have been received as gifts. These gifts can only be briefly mentioned here.

From Mr. Lewis H. Farlow, a collection illustrating the customs of the Moki Indians of Arizona and the Pueblo Indians of the Rio Grande region of New Mexico, and many old and rare objects from the Apache, Navajo, Ute, Cocopa, Mono, Shasta, and Paiute tribes; from Dr. Charles Peabody, about 2,000 specimens, principally of bone and stone, from various places in France, the greater part being from the Cavern of Espélugues, Lourdes; from Mr. Charles P. Bowditch, Japanese prayers and charms; from General George M. Sternberg, U. S. A., through Dr. H. P. Walcott, three medicine masks and a medicine man in miniature, carved in wood, from the Northwest Coast Indians; from Dr. Thomas Barbour, a decorated skull from Vella Lavella Island, Solomon Group, a decorated skull from the Nama District, Papuan Gulf, New Guinea, and three shrunken human heads from the Jivaro Indians of Peru and Ecuador; from Mr. Clarence L. Hay, a shrunken head of a Rio Santiago Indian obtained from the Aguaruna Indians of northern Peru; from Mr. Oric Bates, weapons and a fringed leather apron from the Egyptian Sudan, and a throwing stick from near Bor, White Nile; from Captain W. I.

Moore, six pieces of Peruvian pottery, a number of ethnological specimens from Samoa and the Solomon Islands, and 50 photographs of ethnological types from various countries; from Dr. H. F. Lawrence, U. S. N., through Dr. L. C. Jones, tapa cloth, a kava strainer, kava root and native tobacco from Samoa, a mat from Wallis Island and tapa cloth from the Horne Islands; from Mr. Alanson Skinner, a boy's beaded belt and a birchbark box from the Menominee Indians, a pair of Cayuga moccasins, and 22 photographs of the Menominee Indians; from Mr. Wheeler Sammons, a slate box, six pottery dishes, and explosive arrows from Korea; from Mr. Clarence B. Moore, a representative lot of pottery from the burial mounds of Arkansas; from Dr. Langdon Warner, a bone necklace and a bow from Luzon; from Dr. F. G. Speck, a bone snowshoe needle and a bone die for plate and dice game of the Penobscot Indians; from Miss Ellen M. Cram, a Zulu snuff box; from Mr. Griscom Bettie, 40 chipped implements and a collection of potsherds from Florida; from Mrs. Frances W. Boyden, 17 native weapons from the southern Philippine Islands; from Mr. Frank Wachter, beads, bracelet, pipe and shell ornaments from Indian grave at Trenton, N. J.; from Professor J. B. Woodworth, pottery cup from Teotihuacan, Mexico, chipped implements from old French and Indian fort at Schuylerville, N. Y., stone adze from Lexington, Mass.; from the Misses Norton, 52 pottery heads from Teotihuacan, Mexico, collected by A. F. Bandelier about 1875; from Miss Grace Norton, a cooking basket of the Pomo Indians; from Miss Edith Morrill Hooper, a stone adze from Seabasticook River; from Mr. Philip Hinkle, a cast of the "Cincinnati Tablet"; from Dr. R. B. Dixon, tapa cloth from the Fiji Islands; from Rev. Perley C. Grant, stone adze from Enfield, N. H.; from Mr. H. T. Deane, bones from an Indian grave, Prouts Neck, Maine; from Dr. Carlos de la Torre, a stone adze, three human crania and other bones from caves in Cuba; from Señor Ivan Ciseo Moreno, a stone axe and a shell spoon from Cuba; from Señor Tomas Mora, five stone axe blades from Fajado, Porto Rico; from Mrs. H. W. Price, two stone blades from North Island, New Zealand; from Professor Harrison W. Smith, a cliff-dweller's skull, Colorado, basketry, clothing, weapons, models of a boat and dwelling, and other objects illustrating the life of the natives of Borneo; from Mrs. Herbert Clarke Emery, a stone metate, pottery, shell objects and two ceremonial axes from Nicaragua and Costa Rica, pottery and three gold ornaments from Colombia, also modern pottery and carved calabash cups from

Nicaragua and Colombia; from Dr. C. C. Abbott, several stone implements and bones from the yellow soil at Trenton, N. J.; from Miss Grace Nicholson, 25 photographs taken among the Paiute, Maidu and Pomo Indians of California; from Dr. Thomas Barbour, a book of photographs of Pacific Island natives from negatives by A. E. Pratt and enlargements from copies of other photographs from negatives purchased by the late Dr. C. G. Weld during his visits to Samoa, New Zealand, and Australia; from Mr. S. V. Kidder, 73 photographs of pueblo pottery mostly from New Mexico; from Mr. George W. Nash, 13 photographs of Indians taken in the early days of the wet plate process; from Mr. Charles P. Bowditch, photographs of pictographs from Arizona and California, 211 lantern slides, mostly Maya subjects; from the Buffalo Society of Natural Sciences, four lantern slides of bone-pits in Orangeport, N. Y.; from Mr. George D. Markham, a fine miniature portrait of George Peabody, the founder of the Museum.

On request of the Trustees of the Museum of Fine Arts and by vote of the Faculty of the Museum, an exhibit illustrating the artistic work of the prehistoric peoples of Central America was made in a special room at the Art Museum, from April 16 to May 16. The objects were selected from our Central American collection by Dr. Denman W. Ross. The exhibit comprised many carvings in stone and ornaments made of stone, particularly of jadeite; ornaments in bone, shell, wood, copper, and gold; and pottery of various shapes and ornamentation in color. This exhibit, which attracted much attention and was visited by 5,400 persons, proved a surprise to most of the visitors and acted as an incentive to visit the Peabody Museum for further examination of the prehistoric art of America. On the opening day of the exhibit, Dr. Tozzer, Assistant in Central American Archaeology, gave a lecture, illustrated by lantern slides, on the ruined Maya cities. This was followed by remarks by Dr. Ross, who pointed out many artistic features of special interest in the objects exhibited.

Much work has been accomplished by the assistants in the Museum in cataloguing and caring for the numerous collections received during the year. Mr. Willoughby, Assistant Curator, assisted by Mr. Guernsey, has reinstalled the collections from Central America and Mexico. This hall, thanks to Mr. Hemenway, has been renovated and repainted. The rearrangement has enabled us to make a much larger exhibit of the collections obtained



by the Museum Expeditions of recent years. Several new exhibits have been placed in the South American and African rooms, and numerous specimens have been added to the North American gallery. Many printed labels have been added to the exhibits during the year. Mr. Willoughby has also superintended the construction of a miniature house group of the Seminole Indians of the Florida Everglades from data and photographs furnished by Mr. Alanson Skinner who had recently returned from an exploration of that region for the American Museum of Natural History.

For several months preceding the death of Professor Haynes, Dr. Charles Peabody spent much time with him in the preparation of notes on the specimens in the Haynes collection which were to come to the Museum.

Assistant Professor Dixon, Assistant in Ethnology and Librarian of the Museum, has leave of absence from the University for 1912-13 to travel in the East in connection with his new course on the Ethnography of Asia. In his absence Mr. Carroll, Library Assistant, has prepared the report on the Library for Librarian Lane. The Library now contains 4,800 volumes and 4,497 pamphlets. In addition to the Haynes bequest, the Library has received many gifts of importance, including 73 volumes and 169 pamphlets from Mr. Charles P. Bowditch, and gifts of money from Mr. John B. Stetson, Jr., and Mr. Clarence L. Hay for the purchase of two important Russian anthropological journals. Two new stacks have been added to the Library and there is now no further possibility of extension of the Library except by the completion of the University Museum building.

F. W. PUTNAM,  
*Honorary Curator of the Museum.*

## THE SEMITIC MUSEUM

TO THE PRESIDENT OF THE UNIVERSITY:—

SIR, — The death of Dr. John Orne, Curator of Arabic Manuscripts in the Semitic Museum, occurred on November 11, 1911. Dr. Orne was for many years a teacher of Chemistry and Physics in the Cambridge High School, but his favorite study was Arabic. His office of curator was honorary, and was created by the Corporation in recognition of his voluntary work on the manuscripts. But while honorary, the office was no sinecure. Dr. Orne gave much time to the study of the manuscripts, and prepared several volumes filled with careful descriptions of their condition and contents.

A year ago the Department was much in need of an additional instructor. Through the generosity of a friend, this need has been met by the appointment of Mr. Martin Sprengling, who is now with us conducting courses in Hebrew and Aramaic.

It may not be inappropriate to mention a new honor which has come to Professor Crawford H. Toy, *Emeritus*, long a member of the Department. A volume of Studies in the History of Religions, presented to him by pupils, colleagues, and friends, was published early in November by the Macmillan Company of New York. Of the sixteen essays in the volume six are contributed by colleagues in Harvard University. The volume is intended to be an expression of affection for the man and of admiration for his work.

The growth of the Semitic Museum for the past year has been mainly in additions to its collections of inscriptions from Babylonia and of specimens of wood from Palestine. The Museum fulfils a useful function in furnishing material for illustrating the Semitic instruction. It is also much visited by classes in schools and colleges and by the public.

In the year 1911-12 William E. M. Aitken, who took his Ph.D. degree with us in June, 1911, held the Joseph Henry Thayer Scholarship in the American Archaeological School at Jerusalem. For the current year Harry Wolfson, '11, is holder of a Sheldon Fellowship, and is spending the year abroad studying Mediaeval Jewish Philosophy.

The report of a year ago mentioned the desirability of the publication of a series of Semitic studies in connection with the Department. Since then the Corporation has voted its approval, and has appointed a committee to have charge of the new series, which will consist of occasional volumes in the field of Semitic exploration, philology, literature, history, and religion.

Volume III has recently appeared, and bears the imprint of the University and of the J. C. Hinrichs'sche Buchhandlung, of Leipzig. The title is "Sumerian Tablets in the Harvard Semitic Museum, Part 1, Chiefly from the Reigns of Lugalanda and Urukagina of Lagash. Copied, with Introduction and Index of Names of Persons, by Mary Inda Hussey, Ph.D." There are thirty-six pages of Introduction and Index, seventy-five lithographed plates of the cuneiform texts, and six photographic plates. The Hon. Jacob H. Schiff, who has done so much to foster Semitic research at Harvard, has generously borne the cost of the publication.

Volumes I and II in the series are to give the account of the Harvard expedition to Samaria in the years 1908-10. The appearance of these volumes has been delayed by conditions beyond the control of the editorial committee. I am glad to report that the manuscript has now (December, 1912,) been received. The committee will use all possible despatch in getting the work through the press.

There has been no exploration at Samaria since 1910. It is most desirable that the work should be resumed, either by the University or by other responsible parties. And when the importance of the site is more widely recognized there ought to be no difficulty in finding the means.

DAVID G. LYON, *Curator.*

## THE FOGG ART MUSEUM

### TO THE PRESIDENT OF THE UNIVERSITY:—

SIR, — I have the honor to present the following report on the Fogg Art Museum for the year 1911-12.

This year the following works of art have been received as gifts: from Alfred Atmore Pope, Esq., of Farmington, Conn., a Tondo of the late Italian school, representing the Adoration of the Shepherds; from Paul J. Sachs, of the Class of 1900, 12 etchings by Herman A. Webster, which complete the collection of Webster's work to date, 11 lithographs by Joseph Pennell, 6 lithographs by Alexandre Calame, and one etching by Jules Ferdinand Jacquemart; from the Misses Norton, 38 objects, including Greek vases, terra-cottas, etc.; from the estate of the Rev. Edward H. Hall, of the Class of 1851, four small drawings and two portions of pages of a Choral; and from R. Ederheimer, the Holy Family, an engraving by Albrecht Altdörfer.

Five prints have been added to the Gray Collection by purchase: The Adoration of the Magi and S. Thomas, engravings by Martin Schongauer; Dumbarton Rock, Leader Sea-Piece, and Morpeth, etchings from the series of Turner's *Liber Studiorum*. Three prints have been purchased for the Randall Collection, namely: The Climbers, engraving by Marcantonio after Michelangelo (this reproduces a portion of the famous cartoon of the "Battle with the Pisans," which was executed by Michelangelo in preparation for his proposed fresco in the Council Hall of the Palazzo Vecchio; the fresco was never painted, the cartoon disappeared, and the print by Marcantonio is one of the few remaining traces of this work of genius); a fine impression of the Judgment of Paris, also by Marcantonio, after Raphael; and Holy Island Cathedral, etching by Turner for the *Liber Studiorum*.

The Museum has received the following objects as loans: a Tondo, representing the Mystic Marriage of S. Catherine, which was formerly attributed to Filippino Lippi, but now is thought to be by Raffaelino di Carli, lent by Mrs. Francis P. Nash; a Madonna and Child with Angels, by Sano di Pietro, a water-color painting by Dante Gabriel Rossetti, called "Before the Battle," a Venetian Scene by Francesco Guardi, and a Risen Christ by William Blake,

all lent by the Misses Norton; a Madonna and Child of the Florentine school, a Madonna and Child of the Venetian school, and an Annunciation attributed to Lazzaro Bastiani, lent by Hervey E. Wetzel, of the Class of 1911; a German painting of the sixteenth century, representing the weighing of a human soul by three saints, and an early Flemish copy of Michelangelo's Holy Family, lent by the Museum of Fine Arts, Boston; an oil marine by Daubigny, lent by Mrs. Warren K. Blodgett; and 13 Dürer prints, lent by Francis Bullard, of the Class of 1886, for the exhibition of early German engraving.

In March, 1912, the exhibition of nineteenth century etchings in the Print Room was replaced by an exhibition of the works of the fifteenth century German engravers and Dürer.

The photograph department has received as gifts 85 photographs from Mr. Bernhard Berenson, 263 from the Haynes bequest to the Classical Department, and 6 from other sources, making a total of 354. 121 photographs were purchased, so that the photograph collection at present numbers 43,783. 313 photographs have been catalogued during the year, and in the department of Italian painting approximately 1,540 photographs have been revised.

The slide collection has received as gifts 20 slides from Miss Louise Nichols, 21 slides from Professor C. H. Moore, and 57 slides from Mr. E. W. Forbes. 229 slides were purchased for the collection, most of which were of Spanish architecture. The slide collection now numbers 5,110. During the year 327 slides have been catalogued.

The library of the Museum has received 11 volumes as gifts, and 66 volumes were purchased. Of the whole number, four were gallery catalogues, and 16 were for students' use.

During the year photographs have been lent 141 times to various members of the University, and occasionally to outside individuals. In the same manner, slides were lent 276 times. The sum of \$31.34 has been received from the sale of catalogues, photographs, and post-cards during the year, and \$11.56 for outside work.

The total number of prints catalogued was 915, of which five belong to the Gray Collection, 880 to the Randall Collection, and 30 to the Museum Collection. The number of visits to the print department made by outsiders was 69.

At the suggestion of Professor James H. Ropes, Dean in charge of University Extension, the Fogg Museum bought a set of thirty

Greek slides and a set of thirty-three Roman slides. Notices were sent to all the high schools and some of the private schools in Massachusetts, asking if they would like to have these slides as loans, for use in the schoolroom. A number of schools were interested, and, although the plan was not started until March, the slides were actually sent to twenty schools. Several of the principals expressed enthusiasm in the plan, and were much pleased to receive the slides. The success of the start which was made last year makes it probable that in the future this work can be done on a larger scale.

The need of improvement in the Fogg Museum building has been apparent for many years, and has been referred to more than once in the Director's reports. The Committee on the Fogg Museum and members of the Fine Arts Department have been studying this problem for some time. At last a solution has been discovered which seems to offer hopes of great improvement in the building. The generous gift of \$9,000 from Mr. Alfred Atmore Pope, of Farmington, Connecticut, has made it possible to effect the desired changes on the ground floor. About one-half of the money needed for alterations on the second story has been raised, but about \$10,000 is still needed to complete the proposed improvements in the building. It is hoped that this money may be raised in time to do the rest of the work next summer; that is, to increase the number of skylights, to raise the ones already in existence, to get more windows, and make some changes in the interior walls which will give more light and air in the whole upper floor, including the main galleries, administration and photograph rooms, and the print room.

The work which Mr. Pope's generosity has enabled us to carry on was started during the summer months, and will be completed on or about the first of November. The most important change is in the large lecture hall. A semi-circular wall has been built, dividing this room into two parts, — a lecture hall, capable of holding about 205 people, with a raised platform at the back suitable for the exhibition of large casts; and a semi-circular corridor outside the lecture room, for the exhibition of other casts. This will add materially to the exhibition space in the Museum, and will make it possible to separate the casts and the original works of art. The lecture hall will be smaller and more useful than before for classes of the size of the courses in fine arts. Certain changes also have been made in the small rooms on either side of the main entrance hall. Plaster belts and cornices have

been removed, one door and one recess have been filled in with plaster, and one other door reduced in size, thus increasing the wall space available for exhibition. Two of these rooms cannot be used for Museum purposes for a year or two, because the fine arts books belonging to the College Library are at present housed in them. Radical changes have been made in the system of keeping the semi-circular part of the building water tight. The gutters have been altered, and in one part the porous stone has been painted in such a way that the painting is scarcely noticeable, and it is hoped that it will leak no more. We trust that next year the rest of the building may be made waterproof. Thus the Fogg Museum has been much improved, and its usefulness should increase.

EDWARD W. FORBES, *Director.*

## THE GERMANIC MUSEUM

TO THE PRESIDENT OF THE UNIVERSITY: —

SIR, — The academic year 1911-12 was marked by one striking advance in the Museum cause: the formal laying of the cornerstone of the new Museum building, which took place on June 8, 1912. Unfortunately, the donor of the building, Mr. Adolphus Busch, was prevented by illness from attending. He was, however, represented by Mrs. Busch, and by Mr. and Mrs. Hugo Reisinger, his son-in-law and daughter. The German Ambassador, Count von Bernstorff, who performed the ceremony, brought greetings from His Majesty, the German Emperor, and from the Imperial Chancellor. After the ceremony, the Germanic Museum Association gave a luncheon at the Harvard Union, at which President Lowell, Count von Bernstorff, and Professor Francke made addresses. In addition, President Lowell read a communication from ex-President Andrew D. White of Cornell University, who as Ambassador to Germany had taken a part in the beginnings of our undertaking; and Mr. Reisinger read a message from Mr. Busch, from which the following passages may here be inserted: —

We German-Americans have every reason to do what we can to bring to its consummation an undertaking which appeals both to our allegiance to the country of our choice and to our love for the land of our birth. We have found in this country the realization of hopes and aspirations which, to many of us, at least, would have been denied in our old home. We have found here greater opportunity for work on a large scale, we have found here a better chance for the average man to rise above the restrictions of class and tradition; we have found here a public life based upon the ideals of political freedom and civic independence. We are grateful for all this and we shall do our part in maintaining lawful liberty in this country. But we cannot forget that Germany is above all countries the home of free inquiry and of individual conviction, that it is the land of earnest and manly devotion to the public weal, the land of rational social reform, the land of serious thought and of harmless enjoyment of life, the land of sentiment and song. And we should be faithless to our obligations to our adopted country if we did not try to implant upon American life something of this German honesty and independence of moral conviction, of this German genuineness and wealth of feeling, of this German power for simple and healthy enjoyment.

We German-Americans, therefore, are bound to see in this Germanic Museum connected with an American university a symbol of our twofold



relation to American life and a visible and solemn appeal to do justice to both. Lastly, we Americans of German descent are particularly glad that it is Harvard University, the oldest and most venerable American institution of learning, which has opened its hospitable doors to these treasures of German art. Harvard has always in a conspicuous manner stood for the German ideals of free scientific inquiry and of individual moral responsibility, and it is largely due to her leadership that these ideals are now dominant in all the universities throughout our land.

I doubt not that in this museum matter also Harvard's leadership will serve as an example to other educational institutions and I look forward to a time when we shall have Germanic museums at Columbia and Wisconsin universities, in Chicago, St. Louis, and San Francisco. Meanwhile it is for us to see to it that this first Germanic Museum in America grows up to the full measure of the auspicious foundations which have been laid today; and I repeat, every German-American should consider it his patriotic obligation to help in its upbuilding. As for myself, I am proud of my connections with it, and shall be as long as I live.

It is unfortunate that, owing to certain contract obligations, the Corporation is at present unable to get possession of the land assigned to us, so that the further work of construction must be delayed, possibly for two years more. The time will be utilized by the architect, Professor Bestelmeyer, in working out every detail of his plan, so that we may ultimately look forward to a building unusually well appointed and in every way adapted to our needs.

The plan includes a number of rooms for a Seminary and a special Library on the History of German Culture. I am now ordering books to make a beginning of such a Library, using the income of the \$10,000 given by Mr. Frohman, which is to be spent at the discretion of the Curator for defraying current expenses.

The Museum has suffered a great loss in the death last spring of Mr. Henry W. Putnam. Ever since the plan of a Germanic Museum was first suggested, Mr. Putnam was one of its most earnest and effective supporters. He himself gave liberally to its collections, he helped to raise the Emperor William Fund, for more than ten years he was Chairman of the Board of Directors of the Germanic Museum Association, and he was at all times willing and eager to give work and counsel. It was a grief to his associates that this trusted and faithful friend should not have been with them at the laying of the corner-stone of the new museum building, in which he himself had taken such keen and generous interest.

KUNO FRANCKE, *Curator.*

## PUBLICATION OFFICE

TO THE PRESIDENT OF THE UNIVERSITY:—

SIR, — I have the honor to submit my report for the academic year 1911–12.

During this period the work of the Publication Office has increased materially. In the course of the year the University took over the publication of the Harvard Economic Studies (7 volumes), the Harvard Historical Studies (16 volumes), the Harvard Law Review, and twenty case-books written by professors in the Law School. A new periodical, The Architectural Quarterly of Harvard University, has also been added to the list of publications with the Harvard imprint. Altogether more than eighty books and periodicals are now distributed from the Publication Office. These publications are sold in the principal bookstores throughout the country, and the Oxford University Press keeps a stock of them in London and supplies dealers in Great Britain and on the continent.

Leaving out of consideration the books acquired during the year, the receipts from the sale of publications amounted to more than \$14,000, an increase of \$3,000 over the corresponding figures for the preceding year. The printing done in the small plant operated by the University represented a business of approximately \$42,000.

The University has not only a much longer list of publications than ever before but it also has a greater number of new books in preparation. Among the latter volumes the following may be mentioned as noteworthy:—

Lectures on Legal History. By James Barr Ames.

The Granger Movement in the United States. By S. J. Buck.

The Barrington-Bernard Correspondence. Edited by Edward Channing.

The Cotton Manufacturing Industry in the United States. By M. T. Copeland.

The Year Books of Richard II. By G. F. Deiser.

Complete sets of the Harvard Law Review. (Reprints of the 25 volumes already issued.)

The Ottoman Empire in the Time of Suleiman the Magnificent. By A. H. Lybyer.

Chivalry in English Literature. By W. H. Schofield.

The History of the Grain Trade in France. By A. P. Usher.

Cases on Constitutional Law. By Eugene Wambaugh.

The increased activity of the Publication Office has served to emphasize more than ever the need for a real University Press. The reasons for the establishment of such an institution may be briefly summarized as follows: —

1. The University has several funds for the publication of special series and an adequately endowed University Press could far more efficiently and economically secure the proper distribution of these works than is at present possible with the University's meagre publication facilities.

2. There are several learned publications edited by committees of the Faculty which must now be issued elsewhere; their publication by a Harvard Press would more closely connect these valuable researches with the name of the University.

3. The University spends more than \$100,000 for printing each year, and owing to lack of space only a fraction of this work can be handled in the existing plant. Even the work which is now undertaken is done under great difficulties. More accurate and satisfactory work at a lower cost could be secured if the University maintained an adequate Press.

4. A Harvard Press could do much to add to the prestige of the University by connecting its name more closely with works of scholarly distinction. At present many important contributions to learning by members of the Faculty are issued under the imprints of commercial publishers, sometimes even of other universities, and are not connected in the public mind with the institution at which they were produced.

5. A Harvard University Press could also contribute materially to the advancement of knowledge. At present a number of works of high scholarship are being produced by members of the University and because of our lack of publication funds and our inadequate equipment many of these books are never issued.

6. With the establishment of a University Press it will be possible to increase the effectiveness of the instruction in printing now offered in the Graduate School of Business Administration. This course has met with hearty approval from members of the Typothetae and from other employing printers. To reach its greatest usefulness, however, such a well equipped laboratory as a University Press would provide is needed.

7. This institution would also make possible the establishment of a national testing laboratory for printers. Several master printers have suggested the need for such an institution for research and investigation, and the financial support of such experimentation seems assured. As a workroom for these investigations, however, a well equipped University Press is needed.

That the need for such an institution is becoming generally recognized is shown by the recent establishment of presses at several universities in this country. No one of these universities, however, maintains a publishing plant comparable with the Presses at Oxford and Cambridge, and in that fact seems to lie the opportunity for Harvard University. "There is a very definite need in this country," to quote from my last year's report,

“for a learned press where large fonts of type of Arabic, Hebrew, Sanskrit, Russian, and other tongues might be found, where compositors skilled in setting foreign languages and mathematical formulae might be gathered, and where work of scholarly accuracy might be executed. The first press of adequate scope to be established in the United States will draw to it, from all parts of the country, learned work which is now sent abroad, and Harvard University has still the chance to establish such an institution. The opportunity is not one that can be postponed, however, for the need is so well recognized and the advantages to be derived are so considerable that within the next few years some university is sure to take advantage of the situation.”

C. CHESTER LANE, *Publication Agent.*

## UNIVERSITY EXTENSION

TO THE PRESIDENT OF THE UNIVERSITY:—

SIR,—The following report covers the work of University Extension for the academic year 1911-12, including the Summer School of Arts and Sciences for 1912.

### I. THE SUMMER SCHOOL OF ARTS AND SCIENCES

The general courses of the Summer School were given by thirty-two officers of the Faculty of Arts and Sciences, including three professors, two lecturers, eight assistant professors, fourteen instructors, one fellow for research, four assistants; together with five professors, one assistant professor, and one instructor from other institutions; and two gentlemen not holding academic positions. In addition, one Harvard instructor offered a course for which a sufficient number of persons did not apply to justify giving the course. Eight persons were employed as assistants in the summer courses. The usual courses at the Hemenway Gymnasium and the Engineering Camp engaged the services of a large number of other instructors, lecturers, and assistants.

The list of courses, as formerly given in the Report of the Dean of the Faculty, follows. In order to make the record complete, the lists also for 1910 and 1911, which were not given in previous reports, are here included.

### SUMMER COURSES OF INSTRUCTION

All courses met five times a week, for six weeks.

The degrees (A.B., S.B., A.A.) for which a course was accepted are indicated after the name of the course. The courses accepted for a degree are valued as half-courses, unless otherwise stated.

For summer courses in Engineering and Shopwork, see pp. 50-51.

Harvard students are designated by their status in the academic year preceding the Summer School.

1910

#### ARCHITECTURE

S4a. MR. E. T. PUTNAM. — Elementary Design. (A.B., S.B., A.A.)

2 So., 1 Ju., 2 Sp., 1 Gr., 1 Law, 2 S.S. Total 9.

## ASTRONOMY

- S1. Dr. J. C. DUNCAN. — Elementary Astronomy. (A.B., S.B., A.A.)  
5 S.S. Total 5.  
Dr. J. C. DUNCAN. — Special Course. (A.B., S.B., A.A.)  
1 So. Total 1.

## BOTANY

- S1. Asst. Professor W. J. V. OSTERHOUT. — Elementary Botany. (A.B., S.B., A.A.)  
1 Fr., 1 Ju., 4 S.S. Total 6.  
S2. Asst. Professor W. J. V. OSTERHOUT. — Plant Physiology. (A.B., S.B., A.A.)  
1 Ju., 3 S.S. Total 4.  
S20. Asst. Professor W. J. V. OSTERHOUT. — Research in Plant Physiology. (A.B., S.B., A.A.)  
1 S.S. Total 1.

## CHEMISTRY

- S1. Asst. Professor G. P. BAXTER. — Elementary Chemistry. (A.B., S.B., A.A.)  
2 Fr., 1 So., 1 Ju., 17 S.S. Total 21.  
S2. Professor W. L. JENNINGS (Worcester Polytechnic Institute). — Organic Chemistry. (A.B., S.B., A.A.)  
1 So., 1 Ju., 10 S.S. Total 12.  
S3. Professor W. L. JENNINGS (Worcester Polytechnic Institute). — Qualitative Analysis. (A.B., S.B., A.A.)  
1 Fr., 2 Se., 1 Sp., 7 S.S. Total 11.  
S4. Asst. Professor G. P. BAXTER. — Quantitative Analysis. (A.B., S.B., A.A.)  
1 So., 2 Ju., 2 S.S. Total 5.  
S6. Dr. G. S. FORBES. — Physical Chemistry. (A.B., S.B., A.A.)  
1 So., 2 Se., 1 S.M., 5 S.S. Total 9.  
S20c. Professor W. L. JENNINGS (Worcester Polytechnic Institute). — Research in Organic Chemistry. (A.B., S.B., A.A.)  
1 S.S. Total 1.  
S20f. Asst. Professor G. P. BAXTER. — Research in Inorganic Chemistry. (A.B., S.B., A.A.)  
1 Gr., 2 S.S. Total 3.

## ECONOMICS

- S1. Professor A. B. WOLFE (Oberlin College). — Principles of Economics.  
10 S.S. Total 10.

## EDUCATION

- S2a. Asst. Professor A. O. NORTON. — General Principles. (A.B., S.B., A.A.)  
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- SC. Associate Professor R. P. UTTER (Amherst College). — Composition, third course. (A.B., S.B., A.A.) 1 Se., 1 Sp., 18 S.S. Total 20.
- S3. Professor J. W. RANKIN (University of Vermont). — Anglo-Saxon. (A.B., S.B., A.A.) 2 Gr., 8 S.S. Total 10.
- S28. Professor E. A. GREENLAW (Adelphi College). — Development of English Literature in Outline. (A.B., S.B., A.A.) 16 S.S. Total 16.
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## METALLURGY

- S12. Mr. H. M. BOYLSTON. — Metallography. (S.B., Met. E., A.A.)  
1 Se., 3 S.S. Total 4.

## MUSIC

- S1. Asst. Professor W. R. SPALDING. — Appreciation of Music. (A.B.,  
S.B., A.A.) 1 Fr., 2 Ju., 1 Se., 4 S.S. Total 8.
- S2. Dr. A. T. DAVISON, Jr. — Elementary Harmony. (A.B., S.B., A.A.)  
5 S.S. Total 5.
- S3. Asst. Professor W. R. SPALDING. — Advanced Harmony. (A.B., S.B.,  
A.A.) 6 S.S. Total 6.

## PHILOSOPHY

- S1. Asst. Professor G. P. ADAMS (University of California). — General  
Introduction to Philosophy. (A.B., S.B., A.A.) 5 S.S. Total 5.

## PHYSICS

- SB. Dr. H. C. HAYES. — Elementary Experimental Physics for Teachers.  
(A.B., S.B., A.A.) 1 Se., 14 S.S. Total 15.

## PSYCHOLOGY

- S1. Asst. Professor R. M. YERKES. — Descriptive Psychology. (A.B., S.B., A.A.) 2 Fr., 4 S.S. Total 6.
- S2. Asst. Professor R. M. YERKES. — Educational Psychology. (A.B., S.B., A.A.) 7 S.S. Total 7.
- S3. Dr. WILLIAM HEALY (Juvenile Psychopathic Institute, Chicago). — Psychology and Training of the Mentally and Morally Abnormal. (A.A.) 24 S.S. Total 24.
- S20. Asst. Professor R. M. YERKES. — Advanced Work in Psychology. (A.B., S.B., A.A.) 1 S.S. Total 1.

## PUBLIC SPEAKING \*

- S1. Mr. G. R. BUNKER. — Vocal Technique in Speaking and Reading. (A.B., S.B., A.A.) 11 S.S. Total 11.
- S3. Asst. Professor I. L. WINTER. — Training in the Delivery of both Selected and Original Speeches. (A.B., S.B., A.A.) 13 S.S. Total 13.
- S4. Asst. Professor I. L. WINTER. — Vocal Interpretation of English Prose and Poetry. (A.B., S.B., A.A.) 7 S.S. Total 7.
- S7. Asst. Professor I. L. WINTER. — Vocal Interpretation and Public Speaking. (A.B., S.B., A.A.) 12 S.S. Total 12.

## SOCIOLOGY

- S1. Professor GARRETT DROFFERS (Williams College). — Principles of Sociology and Social Problems. (A.B., S.B., A.A.) 1 Ju., 23 S.S. Total 24.

## SPANISH

- S1. Mr. G. L. LINCOLN. — Elementary Spanish. (A.B., S.B., A.A.) 2 So., 9 S.S. Total 11.

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In numbers of students enrolled, the general courses of the Summer School of 1912 substantially held their own, while there was a marked increase in the normal courses in Physical Education, given at the Hemenway Gymnasium under Dr. Sargent.

The total number in attendance was as follows: —

	1909	1910	1911	1912
Total number of students .....	933	873	787	823
" " " men .....	438	476	400	423
" " " women .....	495	397	387	405
Percentage of men .....	47%	54.5%	51%	51%

\* Any two courses in Public Speaking taken together in the same year count as one half-course.



This body of students was made up as follows:—

	1909	1910	1911	1912
Students at Engineering Camp * . . . . .	12	31	19	10
Harvard students of preceding academic year: † . .				
Members of graduate and professional schools . . . . .	17	19	10	16
Undergraduates in good standing . . . . .	46	61	43	48
Undergraduates with deficient record . . . . .	42	57	35	35
Radcliffe students of preceding academic year . . . .	7	11	6	12
Students in Physical Education courses . . . . .	160	170	186	222
Students from outside in general courses . . . . .	653	528	492	485
	<hr/>	<hr/>	<hr/>	<hr/>
	937	877	791	828
Names counted twice . . . . .	4	4	4	5
	<hr/>	<hr/>	<hr/>	<hr/>
	933	873	787	823

The composition of the group entitled "Students from outside in general courses," was as follows:—

	1909	1910	1911	1912
Teachers and school officers:				
Professors and college instructors . . . . .	52	40	40	29
Normal school teachers . . . . .	16	14	5	7
High school teachers . . . . .	121	98	94	88
Grade school teachers . . . . .	63	100	75	72
Endowed and private school teachers . . . . .	64	54	52	43
Other teachers . . . . .	86	34	38	29
Superintendents, supervisors, and principals . . . .	59	55	50	52
	<hr/>	<hr/>	<hr/>	<hr/>
Total, teachers and school officers . . . . .	461	395	354	320
Men . . . . .	163	162	135	135
Women . . . . .	298	233	219	185
Percentage of men . . . . .	35%	40%	38%	42%
Students from other colleges . . . . .	48	39	27	30
Students from preparatory schools . . . . .	2	7	5	7
Other students . . . . .	47	21	11	9
Other occupation than teaching . . . . .	33	34	45	82
Occupation not given . . . . .	62	32	50	37
	<hr/>	<hr/>	<hr/>	<hr/>
	192	133	138	165
	461	395	354	320
	<hr/>	<hr/>	<hr/>	<hr/>
Total, students from outside taking general courses . . . . .	653	528	492	485
Men . . . . .	261	243	209	224
Women . . . . .	392	285	283	261
Percentage of men . . . . .	40%	46%	42.5%	46%

\* Not including Engineering Camp students who were at the time members of Harvard University.

† Not including Harvard students in Shopwork courses.

In this body of "students from outside" there were:—

	1909	1910	1911	1912
Holders of A.B., S.B., or some equivalent degree .....	173	148	170	151
Holders of a higher degree .....	71	57	48	47
Members of the Summer School in one of preceding five years .....	146	99	136	154

The geographical distribution of this same group was as follows:

New England States .....	327	257	261	275
Middle States .....	157	124	94	76
South Atlantic States .....	57	26	36	33
South Central States .....	19	26	26	15
North Central States .....	66	72	52	73
Western States .....	6	5	5	9
Foreign Countries .....	21	18	18	4
	<hr/>	<hr/>	<hr/>	<hr/>
	653	528	492	485

The general courses of the Summer School cost in 1912 over \$1,000 more than they earned. This deficit is, however, more than balanced by the surplus in the courses in Physical Education.

## II. COMMISSION ON EXTENSION COURSES

The Commission on Extension Courses, representing the following institutions:—

Harvard University	Boston University
Tufts College	Museum of Fine Arts
Mass. Institute of Technology	Wellesley College
Boston College	Simmons College

offered in 1911-12 the following courses, all of which, by vote of the Faculty of Arts and Sciences, were accepted for the Harvard degree of A.A. The table shows for each course the number of students in the course, and the number of certificates granted.

	Students	Certificates
Shakespeare (Professor Neilson, Harvard University) . . . . .	45	18
English Composition (Mr. Hersey, Harvard University) . .	74	29
Music (Professor Marshall, Boston University) . . . . .	112	47
Elementary Economics (Professor Baldwin, Boston Univ.) .	65	27
Industrial Organization (Professor Metcalf, Tufts College) .	47	36
Psychology (Professor Yerkes, Harvard University) . . . . .	69	22
Accounting (Professor Cole, Harvard University) . . . . .	132	22
Commercial Organization (Mr. Cherington, Harvard University) . . . . .	61	4
Advanced Composition (Professor Sharp, Boston University)	116	35
English Literature (Professor Black, Boston University) . .	83	48
Elementary German (Professor Perrin, Boston University)	78	41
Moslem Art (Mr. Borden, Harvard University) . . . . .	82	12
Greek Mythology (Dr. Fairbanks, Museum of Fine Arts) .	36	12
Historical Geology (Professor Barton) . . . . .	31	12
Petrology (Professor Barton) , . . . .	32	11
Geography (Professor Johnson, Harvard University) . . . . .	56	40
Botany (Professor Osterhout, Harvard University) . . . . .	31	17
	<u>1,150</u>	<u>433</u>

As the figures show, the proportion of certificates to the total enrolment was just under 38 per cent.

All the courses were accepted for the degree of A.A. by Radcliffe College and Tufts College, as well as by Harvard University; Wellesley College accepted all except those in Accounting and in Commercial Organization.

The financial statement of the Commission's courses is as follows:—

<i>Expenses</i>		
Salaries . . . . .	\$16,857.40	
Lecture-room expenses . . . . .	1,012.40	
Advertising . . . . .	234.96	
Printing and stationery . . . . .	339.12	
Postage . . . . .	224.95	
Office and clerical expense . . . . .	148.98	
Teachers' School of Science general expenses (not including salaries):		
Equipment and administration . . . . .	\$258.04	
Less sale of microscopes . . . . .	10.00	248.04
		<u>\$19,065.85</u>
<i>Income</i>		
Fees . . . . .	\$7,320.00	
Lowell Institute . . . . .	11,217.08	
Mrs. Shepherd Brooks's gift for Teachers' School of Science . . . . .	147.15	
Chamber of Commerce subscription . . . . .	381.62	
		<u>\$19,065.85</u>

## III.

In 1911-12, eleven persons were registered as "Extension Students," admitted to regular courses under the Faculty of Arts and Sciences. These were in nearly all cases either members of other neighboring institutions or persons engaged in some regular calling (such as playing in the Boston Symphony Orchestra), but able to give a part of their time to study. Under former conditions some of them would have been admitted as Special Students in Harvard College. As "Extension Students" they are not members of Harvard College, but are affiliated students of the University. The Committee on Admission of the Faculty of Arts and Sciences has now consented to take charge of the admission of students to this status.

The Dean was able in the course of the year to coöperate with the Fogg Art Museum in an interesting undertaking whereby sets of slides illustrating Greek and Roman civilization and art are lent to Massachusetts high schools. This piece of extension work is more fully described in the report of the Director of the Museum.

JAMES HARDY ROPES, *Dean*.

## RADCLIFFE COLLEGE

### TO THE PRESIDENT OF THE UNIVERSITY:—

SIR,—I have the honor to submit the report of Radcliffe College for the academic year 1911-12.

The number of students in actual attendance during the year was 566, as against 500 during the preceding year.

Graduate Students . . . . .	85
Seniors . . . . .	78
Juniors . . . . .	66
Sophomores . . . . .	67
Freshmen . . . . .	117
Special Students . . . . .	142
Unclassified Students . . . . .	11
<hr/>	
Total . . . . .	566

At Commencement in June, 1912, eighty-one students, four of whom had completed their residence in an earlier year, received the degree of Bachelor of Arts. Two students who had not been registered as Seniors received the degree, and three students who had been so registered failed to receive it. One of the eighty-one received the degree *summa cum laude*; six received it *magna cum laude*; twenty-six, *cum laude*.

Thirty-four candidates received the degree of Master of Arts. Twelve of the thirty-four had taken their first degree at Radcliffe; the others represented the following colleges: Boston University, Colby College, Colorado College, Dalhousie University, Irving College, Mount Holyoke College, Pomona College, Smith College, Swarthmore College, Teachers' College, Tufts College, Vassar College, Wellesley College, and the Universities of Alabama, Cincinnati, Idaho, Illinois, New Brunswick, Rochester, and Wisconsin. Eighteen received the degree in English, five in French and Other Romance Languages and Literatures, two each in the Classics, in History and Political Science, in Philosophy, and in Botany, and one each in German, in Education, and in Social Ethics.

The degree of Doctor of Philosophy was conferred upon two candidates, both in the special field of English Philology: Char-

lotte Farrington Babcock, A.B. (Radcliffe) 1906, A.M. (*ibid.*) 1909, and Bertha Marion Pillsbury, A.B. (University of Illinois) 1895, A.M. (Radcliffe) 1898.

One hundred and twenty-nine candidates took the preliminary examinations, and one hundred and thirty the final examinations. Three of the four candidates who took wholly or in part the examinations of the College Entrance Examination Board were admitted to the Freshman Class. The new plan of admission was tried by thirty-eight candidates in June and in September, thirty-four of whom passed. Of the six candidates who were rejected under this plan in June three tried the new plan again in September and passed; and one completed her examinations in September under the old plan. Fifteen schools, chiefly in distant places, which have not regularly prepared pupils for Radcliffe, sent candidates for the examinations under the new plan. The results of the final examinations are given in the following table:—

	Admitted	Admitted "clear"	Rejected
June . . . . .	79	51	10
September . . . . .	30	15	5
	<hr/>	<hr/>	<hr/>
	109	66	15
Total rejected . . . . .	15		
Candidates in June who did not reappear in September . . . .	6		
	<hr/>		
	130		

The entering class of 1912-13 numbers ninety-seven, who were admitted, ninety-one in 1912, four in 1911, one in 1910, and one in 1909.

Eighty-five graduate students registered during the year 1911-12, fifty-five of whom were from colleges other than Radcliffe. Fourteen students were admitted to ten whole courses, and thirty-six students to twenty half-courses of the "Courses Primarily for Graduates in Harvard University open to competent students of Radcliffe College."

The Caroline I. Wilby Prize was awarded to Charlotte Farrington Babcock for her Doctor's dissertation. The Captain Jonathan Fay Diploma and Scholarship were awarded to Bessie London, 1912. The Sylvia Platt Prize of fifty dollars, offered for the first time in 1912 by Mary Caroline Hardy, 1901, for the best poem by a Radcliffe student, was awarded to Abbie Huston Evans, a special student. The Alice Freeman Palmer Fellowship in

the award of Wellesley College was awarded for 1912-13 to Bessie Marion Coats, A.B. (Vassar) 1907, A.M. (Radcliffe) 1912. The European Fellowship of the Association of Collegiate Alumnae and the Fellowship of the Archaeological Institute of America were awarded for 1912-13 to Margaret Coleman Waites, A.B. (Radcliffe) 1905, Ph.D. (*ibid.*) 1910. The Astronomical Fellowship of the Nantucket Maria Mitchell Association, offered for the first time in 1912, was awarded for 1912-13 to Margaret Harwood, A.B. (Radcliffe) 1907.

Two prizes open to competition by the students of Harvard University and of Radcliffe College were awarded in 1912 as follows: the Old Testament Prize to Grace Martha Harriman, 1912, and the Craig Prize in Dramatic Composition to Elizabeth Apthorp McFadden, B.L. (Smith) 1898, Radcliffe graduate student, 1908-09, 1910-11. The Charles Eliot Norton Fellowship in Greek Studies in Harvard University was awarded for 1911-12 to Hetty Goldman, A.B. (Bryn Mawr) 1903, A.M. (Radcliffe) 1910, who held the same fellowship in 1910-11.

The members of the Academic Board for 1911-12 were Professor Byerly (Chairman), and Professors E. L. Mark, H. S. White, E. H. Hall, H. W. Smyth, A. A. Howard, G. L. Kittredge, C. H. Grandgent, E. F. Gay.

The close of the college year was saddened by the death of Professor William Watson Goodwin. Radcliffe College, together with Harvard College, bears witness to her indebtedness to Professor Goodwin. He was one of the signers of the Articles of Association of the Society for the Collegiate Instruction of Women, together with Mrs. Agassiz, Professor and Mrs. Gurney, Professors Child, Greenough, Norton, and Peirce, and others now living, whose approval gave adequate assurance in the eyes of many that the experiment they had undertaken would be carried out according to the highest ideals of scholarship. He remained an Associate until his death.

At the meeting of the Associates on October 18, 1911, the resignation of Mr. John Forbes Perkins from the Associates was accepted with regret. There were five elections of members of the Associates during the year 1911-12: Mrs. Mabel Harris Lyon, of the Class of 1897, an Associate since 1909, nominated by the Alumnae, was reelected for a term of three years from 1911; Mrs. Mary Lowell Barton, an Associate since 1906, was reelected for a term of three years from 1912; Professor James Hardy Ropes, an Associate since 1906, whose term of office expired in February,

1912, was reelected in June for a term of one year from 1912; Professor Gregory Paul Baxter was elected for a term of two years; and Professor George Howard Parker was elected for a term of three years. Radcliffe College has had the good fortune in the past to have in its Board of Associates several members of the Harvard Faculty. It is suggested that for these Associates there be rotation of office, as in the case of the Harvard Overseers. Professor Fred Norris Robinson was reelected member of the Council for a term of seven years from 1912. Miss Margaret Gilman, a special student in Radcliffe in 1885-86, a daughter of Mr. Arthur Gilman, who was the first Secretary of the College, was appointed Mistress of Sarah Whitman Hall for the year 1912-13.

The College is still young and still poor, but much the richer for receiving last year \$170,290. This sum came through divers channels. Little came by begging. The largest gift came from a patron of education who knew where and how to give. The gifts, bequests, and legacies include the following:—

From the Division of Modern Languages, and the Departments of English and History, \$315, for the purchase of books for the Radcliffe Library. From the Class of 1902, as its decennial gift, \$1,200, toward the fund for instruction. From the estate of Elnathan Pratt, of Worcester, \$4,775, in payment of a legacy to establish a scholarship to be known as the Elnathan Pratt Scholarship, the income to be given by preference to a student coming from Worcester, Massachusetts. From the estate of Mrs. Josiah Parsons Cooke, \$5,000. Mrs. Cooke left this sum to found a scholarship to be called the Josiah Parsons Cooke Scholarship, the income to be given by preference to a student wishing to pursue scientific study. From the executors of the estate of Andrew C. Slater, \$5,000, for a scholarship, the income to be given to needy and deserving students. From the estate of Mrs. Rebecca A. Greene, \$39,000, in addition to the \$175,000 received in 1910-11. From the estate of Mrs. Lydia Augusta Barnard, \$115,000: \$75,000 is for a hall of residence to be known as James and Augusta Barnard Hall; \$30,000 is to found the Anna Parsons Scholarships; \$10,000, which is subject to the payment of certain annuities, is to found the James and Augusta Barnard Scholarships.

These gifts show that Radcliffe has kept old friends, and has found new friends who believe in her possibilities. From the income of the several sums here enumerated for the purpose, ten new scholarships have become available for 1912-13. There is



no better service to be rendered than to open the way into college to those able and deserving young women who cannot work their way as easily as men do, and who run the risk of working it at too great a cost.

Bertram Hall and Grace Hopkinson Eliot Hall, given by Mrs. D. P. Kimball in 1901 and 1906, not only have served the purpose for which they were given, but have done more than anyone expected. The ladies in charge have succeeded in establishing something like family life, free from artificial restraints, among the young women who live in the buildings, and in averting the disadvantages that were looked for by some persons in dormitories for girls.

The complete success of these halls has led to the erection of another of the same type, — Sarah Whitman Hall, built in memory of Mrs. Sarah Wyman Whitman. It was ready for occupation on the first day of the college year, 1912. It stands in Walker Street, near the corner of Shepard Street, facing the Radcliffe field. In the material of which it is built, namely, brick with stone trimmings, it resembles its neighbors, but in the plan of the interior is somewhat different from the other two. It accommodates fifty students, and contains, in addition to bedrooms, rooms for the mistress, parlors, a dining-room, kitchen, and laundry. The portrait of Mrs. Whitman, painted by her friend, Mrs. Daniel Merriman, hangs in the living room. A considerable sum of money toward the building of this hall was given by friends of Mrs. Whitman, with very little solicitation. Radcliffe can never thank adequately those friends for their generosity and devotion to Mrs. Whitman in thus caring for the best interests of the College. The money needed in excess of subscriptions was supplied by the College, and is to be repaid by a sinking fund. It is hoped, however, that further contributions toward this hall will be made later.

James and Augusta Barnard Hall is to be built on the Radcliffe field, at right angles to Bertram Hall, facing Sarah Whitman Hall. This fourth hall will be most acceptable, because the College has land to put it on, and students to put into it. Radcliffe has needed more halls in order to make the resort to the College broad and national. With registered students to the number of 563 in 1912-13, it should certainly have halls for the accommodation of at least 250 students.

A readjustment has been made in the prices of the rooms for 1912-13. In the three halls there are eighteen rooms at \$72 a

year, sixty-two at \$108, and nineteen at \$144. There are a few special combinations of bedrooms and studies in Bertram Hall which are at higher rates. Table board remains as before, \$216 for the thirty-six weeks in the college year. This makes the minimum expense for tuition and for board and lodging in the halls about \$500. It costs more to send a girl to Radcliffe than to send a boy to Harvard.

The interest in the health record of college women students is so general that it may be of interest to state that there have been no deaths in the College this year, and three only among the alumnae.

The Radcliffe alumnae number 1,237, and of these a fourth are married, a large proportion in view of the fact that the early classes were very small, and that the members of the recent large classes are young. More than half of the remainder are employed in a wage-earning occupation.

In 1897-98 the number of students was 424. It remained, with slight variations from year to year, between 400 and 500 until 1910-11, when it reached exactly 500. In 1911-12 it rose suddenly to 566. It is as hard to explain this quick gain in numbers as to account for temporary losses in the past. The increase in 1911-12 was in the Freshman Class, the graduate students, and the special students. There were more Freshmen from outside Massachusetts than before. Perhaps Radcliffe is beginning to illustrate the truth of the statement that women will go on with advanced work if they can go on at the college where they have taken their undergraduate work. This may also be a reason for the increase of the Freshmen. One hundred and one, or one out of twelve, of the holders of the Radcliffe A.B. hold the A.M. or the Ph.D. degree from Radcliffe, whereas only one out of forty hold these degrees from other institutions.

Radcliffe is not trying to do too many things at once, but it has been able, as a rule, to attract students who come well prepared to do their own work, and expect to do it well, eager for the high rewards of scholarship. These women are trying to show that they realize that they are living in a century which "is generous to women in granting them new opportunities, a large share in the learning and intellectual property of the world." Indeed the positions that the Radcliffe graduates are asked to fill call for all the capacities and virtues which they can acquire, from the intellectual to the domestic. Five of them are deans of women in coeducational colleges; sixteen hold appointments as profes-

sors or instructors in colleges, several hold important positions as heads of private schools for girls, in public schools, as social workers, and as mistresses of halls of residence. They are doing distinguished service in various communities, and they are able to do this because they have enjoyed the incomparable opportunities to come in touch with the highest scholarship and to attain modern ideals of equipment through the gifts made to Radcliffe from year to year and through the generosity of Harvard College.

MARY COES, *Dean.*

# APPENDIX

## REPORT OF THE CHAIRMAN OF THE COMMITTEE ON ADMISSION

TO THE PRESIDENT OF THE UNIVERSITY: —

SIR, — I have the honor to submit to you my report as Chairman of the Committee on Admission. During the past year, the Committee have received and acted upon 1,066 applications for admission to Harvard College. The action of the Committee upon these applications is indicated in the tables that immediately follow. With them, I have given, for purposes of comparison, the similar tables for 1910–11.

### *Applications for Admission to the Freshman Class by Examination*

	1911	1912
Admitted without conditions (Old Plan) .....	309	272
Admitted without conditions (New Plan) .....	83	154
Total admitted without conditions .....	392	426
Admitted with conditions (Old Plan) .....	248	219
Total admitted by examination .....	640	645
Refused admission (Old Plan) .....	128	125
Refused admission (New Plan) .....	56	59
Total refused admission .....	184	184
Candidates in June who did not reappear in September	61	40
Total number of candidates .....	885	869

The percentage of men admitted from Public Schools is a little short of that for last year, but not enough to cause any anxiety. As the following figures will show, we have been steadily increasing our representation from the Public High Schools: —

	1906	1907	1908	1909	1910	1911	1912
Percentage of men admitted from Public Schools .....	40.4	42.4	45.3	45.5	43.0	50.9	48.2
Percentage of men admitted from Private and Endowed Schools..	59.4	57.4	54.5	54.4	56.9	49.0	51.7

The effect of the New Plan on our representation from Public High Schools is very noticeable.

I regret that I am obliged to report that our representation from different parts of the country does not increase except in the North Atlantic Division, and possibly in the North Central Division. The following figures represent the numbers of men who have actually entered Harvard College after examination according to the geographical situation of their schools:—

	1906	1907	1908	1909	1910	1911	1912
New England .....	424	416	357	400	410	473	451
North Atlantic (including New England) .....	496	485	415	460	464	542	521
South Atlantic .....	9	3	3	7	5	4	6
Western .....	6	13	5	4	3	3	5
North Central .....	26	22	33	35	24	31	43
South Central .....	0	2	2	0	1	3	2
Foreign .....	2	1	3	1	8	4	2
Insular Territories and De- pendencies .....	0	3	2	2	2	1	0
	<u>539</u>	<u>529</u>	<u>463</u>	<u>509</u>	<u>507</u>	<u>588</u>	<u>579</u>

It is to be hoped that our New Plan of Admission will enable us to increase our representation from outside New England and the North Atlantic Division of states. There is some ground for this hope in the increase in the number of new schools with which we have become connected during the past two years. The following figures represent the numbers of new schools each year which have not appeared before in our School and College List, *i. e.*, the list of schools and colleges from which men have actually entered Harvard:—

1906	1907	1908	1909	1910	1911	1912
32	31	26	28	27	36	35

Of the thirty-six new schools in 1911 and the thirty-five in 1912, the two years during which we have had the New Plan, thirteen in 1911 and twenty-five in 1912 were added by the New Plan, and of these all but one in 1911 and all but seven in 1912 were outside New England.

The New Plan was devised with special reference to high schools, and has already more than justified itself by proving its adaptability to cases of boys who have made their decision to come to Harvard late in their last school year after a course not planned according to examinations under the Old Plan. The proportions of New Plan men according to the kinds of schools they attended are as follows:—

	1911	1912
Percentage of Candidates from Public Schools .....	80.5	79.0
Percentage of Candidates from Private and Endowed Schools .....	19.4	20.9

Similar figures for candidates for admission by the Old Plan are as follows:—

	1911	1912
Percentage of Candidates from Public Schools .....	45.7	41.8
Percentage of Candidates from Private and Endowed Schools .....	54.2	58.1

The attitude of preparatory schools towards the New Plan seems to be, for the most part, one of indifference or of distrust. Such schools are, in a measure, under contract to put their boys into college, and cannot afford to risk what they conceive to be the "chances" of the New Plan, especially before they have had a good opportunity to observe how it works — on others. They conceive that the method of scoring used in the Old Plan is safer, and that the greater number of examinations and the possibility of dividing them provide more incentives to work than are provided for under the New Plan.

From this kind of school have come already two objections to certain provisions of the New Plan, both relating to the prescription of certain examinations. The first objection comes from teachers of Mathematics who fear that the prescription of an examination in either Mathematics or Science will work to the disadvantage of Mathematics by leading to the discontinuance of Mathematics as a fourth-year subject in school. The other objection is that the prescription of an examination in Latin for candidates for the degree of A.B. practically extends the definition of the requirement in Latin by a whole year's work, and by compelling a boy to take Latin in his fourth school year restricts unduly his freedom in planning his course. The objections are such as would be felt chiefly in schools of the "preparatory" type; and as yet such schools have not to any great extent used the New Plan. The Committee have both these objections under careful consideration.

The statistics concerning the admission of students from other colleges present no unusual features. Under the new rules for the choice of electives, the work of administering this class of students has greatly increased in amount and difficulty; and undoubtedly these rules will tend to restrict the numbers of men admitted to a class higher than the Sophomore Class. This, however, is a matter which need give us no concern. The statistics for 1910-11 and 1911-12 are as follows: —

	1910-11	1911-12
Admitted as Unclassified Students .....	92	99
"    " Freshmen .....	12	3
"    " Sophomores .....	14	19
"    " Juniors .....	16	12
"    " Seniors .....	2	1
Refused admission .....	25	34
<hr/>	<hr/>	<hr/>
Total number of applicants .....	161	168

The number of applicants for admission as Special Students continues to decline. The figures for 1910-11 and 1911-12 are as follows: —

	1910-11	1911-12
Admitted .....	28	21
Refused admission .....	23	8
<hr/>	<hr/>	<hr/>
Total number of applicants .....	51	29

This falling off in the number of Special Students is partly or wholly accounted for by the fact that the Department of University Extension

now affords a much better way of meeting all legitimate desires for instruction in one or two subjects on the part of men who do not fit into the definition of a regular member of the College. It has seemed to the Committee that it may be well to abolish the category of Special Students, and provide for all who can properly be admitted to our instruction outside of those who are candidates for degrees by means of the provisions for University Extension. The Committee is coöperating with the Dean of the Department of University Extension in an investigation of the subject, and may report to the Faculty later this year.

During the past year, the Old Plan of admission has been simplified by the dropping of examinations in some subjects which have not proved to be useful, and by a revision of our examinations in History to make them uniform with similar examinations of the College Entrance Examination Board. The unsolved problems now before the Committee are the difficulties created under the Old Plan by the present ratings of the modern languages and the difficulties which arise from having two different plans of admission side by side. At present, the outlook is not hopeful for a discontinuance of the Old Plan of admission. If we could find some way of administering that plan wholly by means of the College Entrance Examination Board, we should greatly simplify our administration of admission, and expedite the successful working out of all problems connected with the New Plan. It seems very doubtful to me if we shall ever succeed in establishing the examinations we hope for under the New Plan until we are disembarassed of the Old Plan examinations.

JOHN GODDARD HART,  
*Chairman of the Committee on Admission.*

## REPORT OF THE MEDICAL ADVISER

TO THE PRESIDENT OF THE UNIVERSITY: —

SIR, — I have the honor to present the report of illness among Harvard students for the academic year 1911-12.

The 499 patients cared for at the Stillman Infirmary and listed in Table III are included in Tables I and II. Among these 499 patients Table III mentions two deaths. They were: —

Joseph B. Emerson, December 20, acute pulmonary tuberculosis.

Garrick M. Borden, May 24, septicaemia.

Other deaths among students were: —

Edward L. Rogers, November 23, of injuries received in an automobile accident.

Merle D. Britten, July 4, head crushed by two electric cars.

In addition to the usual Tables I, II and III, Table IV is a report of the more common serious illnesses treated at the Stillman Infirmary since it was opened in 1902. It may be seen that among 157 cases of appendicitis, with 94 operations, since 1905-06, there has not been a death.

Of the sixty-three cases of diphtheria in the ten years there has been no death.

The provision by the University of a Medical Adviser with an office in the College Yard, where he may be easily and freely consulted, is largely responsible for these good results, in that it facilitates early diagnosis, with immediate operation when called for in the case of appendicitis, and the early administration of antitoxin in the case of diphtheria.

The large proportion of the diagnoses of diphtheria are established by culture before it is possible to determine them clinically. The students ill with diphtheria receive their antitoxin so early that it is the exception to be very ill, and difficult for the majority of them to appreciate that their illness should be considered serious.

Much credit for these and other good results must be given to our Stillman Infirmary, which has every modern equipment, including the best of trained nurses, for the care of the sick. The Stillman Infirmary differs from most other hospitals in one particular, in that it maintains no training school for nurses, but employs only those who have graduated from a thorough course of training in some hospital of established reputation. Nineteen cases of typhoid fever without a death, fifty-five cases of scarlet fever with one death, and thirty-four cases of pneumonia with only four deaths, reflect great credit on the skill and faithfulness of our nurses. Further, I think it is the aim of every one connected with the Infirmary to make it as attractive as possible for the boy who is ill away from home. The sunny atmosphere at the Infirmary and the harmony among its employees are largely due to those qualities in the matron in charge, plus her unusual tact and executive ability. The student at the Infirmary is made to feel much more at home by the kindly interest shown by visits from his college adviser, professor, and Dean. The frequent visits of Mrs. Lowell have added a great deal of sunshine to many a sick student.



TABLE I.—ILLNESS REPORT, 1911-12

Diseases	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
Abscesses . . . . .	..	1	1	..	3	2	5	1	2	2	17
Appendicitis . . . . .	1	7	4	2	5	2	8	5	3	2	39
Asthma . . . . .	..	..	..	4	1	..	1	1	..	..	7
Bronchitis . . . . .	..	5	6	4	10	3	5	4	2	..	39
Catarrh . . . . .	..	..	1	..	1	1	1	..	2	..	6
Chicken-pox . . . . .	..	..	..	1	2	1	5	2	1	..	13
Colds—unclassified . .	1	8	25	34	53	40	52	23	30	..	266
Coryza . . . . .	..	1	5	2	3	7	7	6	5	..	36
Dementia Praecox . .	..	..	..	..	..	1	..	..	..	..	1
Diarrhoea . . . . .	..	..	..	1	1	2	4	2	1	1	12
Diphtheria . . . . .	..	..	2	..	..	1	9	..	..	..	12
Ear, of the . . . . .	..	..	1	3	4	2	2	1	1	1	15
Eye, of the . . . . .	..	7	15	16	15	13	25	19	11	4	125
General Debility . . .	..	3	10	13	11	17	23	19	13	9	118
German Measles . . .	..	..	..	..	..	..	2	23	19	..	44
Grippe . . . . .	..	10	23	20	18	27	26	18	5	1	148
Heart, of the . . . . .	..	..	1	3	3	1	..	..	..	..	8
Indigestion . . . . .	1	6	6	11	12	12	7	15	7	5	83
Infections localized . .	1	12	10	12	6	21	15	14	7	1	99
Insomnia . . . . .	..	1	1	2	1	4	3	..	5	1	18
Jaundice . . . . .	..	1	1	1	3	..	1	2	2	..	11
Laryngitis . . . . .	..	8	..	1	2	1	3	1	..	..	11
Lumbago . . . . .	..	..	1	..	..	..	1	..	..	..	2
Malaria . . . . .	..	..	..	..	..	..	..	1	..	..	1
Measles . . . . .	1	..	..	..	..	..	..	3	..	..	4
Miscellaneous Med. . .	..	18	14	20	23	21	39	25	31	9	195
Miscellaneous Surg. . .	4	20	33	19	27	22	27	34	33	15	234
Mumps . . . . .	..	..	..	..	2	..	1	..	1	1	5
Nephritis . . . . .	..	..	..	..	..	..	..	2	..	..	2
Neuralgia . . . . .	..	1	..	1	..	2	1	1	2	..	8
Neuritis . . . . .	..	2	..	..	..	..	..	..	..	..	2
Pharyngitis . . . . .	..	..	2	1	5	10	9	7	1	..	35
Pleuritis . . . . .	..	..	..	..	1	2	..	..	..	..	3
Pneumonia . . . . .	..	..	1	..	..	1	4	1	..	1	8
Rheumatism . . . . .	..	..	1	2	6	1	5	2	2	..	19
Skin, of the . . . . .	..	5	1	2	2	3	3	3	2	1	23
Teeth, of the . . . . .	..	1	2	6	..	2	2	4	1	2	20
Tonsillitis . . . . .	1	5	11	19	18	38	42	33	22	3	187
Tuberculosis . . . . .	..	..	..	1	..	..	1	..	..	..	2
Typhoid . . . . .	..	2	..	..	..	..	..	..	..	2	4
Whooping Cough . . .	..	..	..	..	..	1	..	..	..	..	1
No diagnosis . . . . .	..	5	11	5	4	4	4	3	3	..	39
Totals . . . . .	10	119	189	206	237	265	343	275	214	61	1919
Visits . . . . .	6	89	154	123	163	155	209	130	90	69	1188
Office consultations, med.	9	169	200	200	253	271	352	297	268	91	2110
Office consultations, surg.	5	115	97	106	157	173	131	136	87	31	1038
Total No. consultations	20	373	451	429	573	599	692	563	445	191	4336

Cases not seen by the Medical Adviser . . . . . 1176

TABLE II.—ILLNESS REPORT AS RELATED TO THE DIFFERENT SCHOOLS

Diseases	College						Law	Graduate	G. B.	G. S.	Div.	Med.	Instructors	Totals
	1	2	3	4	Sp.	Dn.								
Abscesses . . . . .	4	2	2	3	..	..	3	3	..	..	..	..	..	17
Appendicitis . . . . .	4	6	7	8	1	..	3	6	1	..	..	3	..	39
Asthma . . . . .	3	1	3	..	..	..	..	..	..	..	..	..	..	7
Bronchitis . . . . .	16	9	6	4	..	..	2	2	..	..	..	..	..	39
Catarrh . . . . .	2	3	..	1	..	..	..	..	..	..	..	..	..	6
Chicken-pox . . . . .	2	5	1	..	..	..	3	1	..	..	..	..	..	12
Colds, unclassified . . . . .	115	67	43	29	..	8	7	1	..	..	1	..	..	266
Coryza . . . . .	8	15	5	3	..	1	2	1	1	..	..	..	..	36
Dementia Praecox . . . . .	..	..	1	..	..	..	..	..	..	..	..	..	..	1
Diarrhoea . . . . .	4	3	5	..	..	..	..	..	..	..	..	..	..	12
Diphtheria . . . . .	1	1	1	1	..	..	5	2	..	..	..	..	1	12
Ear, of the . . . . .	3	2	2	5	..	..	3	..	..	..	..	..	..	15
Eye, of the . . . . .	48	23	33	15	..	4	1	1	..	..	..	..	..	125
General Debility . . . . .	31	23	30	14	2	4	6	5	..	..	2	..	1	118
German Measles . . . . .	28	4	5	1	..	..	1	3	1	1	..	..	..	44
Grippe . . . . .	50	32	29	18	..	1	11	3	2	..	1	..	1	148
Heart, of the . . . . .	4	4	..	..	..	..	..	..	..	..	..	..	..	8
Indigestion . . . . .	27	24	14	6	1	1	4	4	..	..	1	..	..	82
Infections localized . . . . .	31	24	17	10	1	1	5	4	3	2	1	..	..	99
Insomnia . . . . .	2	4	4	1	..	2	3	2	..	..	..	..	..	18
Jaundice . . . . .	4	3	1	3	..	..	..	..	..	..	..	..	..	11
Laryngitis . . . . .	2	3	2	4	..	..	..	..	..	..	..	..	..	11
Lumbago . . . . .	1	..	..	..	1	..	..	..	..	..	..	..	..	2
Malaria . . . . .	..	..	..	..	..	..	..	1	..	..	..	..	..	1
Measles . . . . .	1	2	..	..	..	1	..	..	..	..	..	..	..	4
Miscellaneous Med. . . . .	75	38	20	23	..	5	13	14	2	1	2	..	2	195
Miscellaneous Surg. . . . .	71	46	45	23	3	3	21	11	3	2	2	1	3	234
Mumps . . . . .	3	1	1	..	..	..	..	..	..	..	..	..	..	5
Nephritis . . . . .	..	1	1	..	..	..	..	..	..	..	..	..	..	2
Neuralgia . . . . .	2	2	..	3	..	..	1	..	..	..	..	..	..	8
Neuritis . . . . .	..	..	..	..	..	..	..	1	..	..	1	..	..	2
Pharyngitis . . . . .	7	10	4	5	..	..	4	5	..	..	..	..	..	35
Pleuritis . . . . .	1	..	..	..	1	1	..	..	..	..	..	..	..	3
Pneumonia . . . . .	4	2	..	1	..	..	1	..	..	..	..	..	..	8
Rheumatism . . . . .	7	2	4	2	..	..	2	1	..	..	1	..	..	19
Skin, of the . . . . .	6	3	1	1	..	1	6	3	..	..	..	..	1	22
Teeth, of the . . . . .	5	6	5	2	..	..	1	..	..	..	..	..	1	20
Tonsillitis . . . . .	62	48	29	25	..	1	11	7	1	1	..	2	..	187
Tuberculosis . . . . .	..	1	..	..	..	1	..	..	..	..	..	..	..	2
Typhoid . . . . .	1	..	..	2	..	..	1	..	..	..	..	..	..	4
Whooping Cough . . . . .	..	..	1	..	..	..	..	..	..	..	..	..	..	1
No diagnosis . . . . .	12	7	15	4	..	..	1	..	..	..	..	..	..	39
<b>Totals . . . . .</b>	<b>647</b>	<b>427</b>	<b>337</b>	<b>217</b>	<b>10</b>	<b>30</b>	<b>121</b>	<b>81</b>	<b>14</b>	<b>7</b>	<b>12</b>	<b>6</b>	<b>10</b>	<b>1919</b>
<b>No. of Students . . . . .</b>	<b>739</b>	<b>499</b>	<b>537</b>	<b>372</b>	<b>43</b>	<b>72</b>	<b>808</b>	<b>454</b>	<b>79</b>	<b>123</b>	<b>48</b>	<b>275</b>	<b>..</b>	
<b>% of "Sign-offs" . . . . .</b>	<b>88</b>	<b>86</b>	<b>63</b>	<b>58</b>	<b>23</b>	<b>42</b>	<b>15</b>	<b>18</b>	<b>18</b>	<b>6</b>	<b>25</b>	<b>2</b>	<b>..</b>	
<b>No. of Students at Infirmary . . . . .</b>	<b>98</b>	<b>74</b>	<b>74</b>	<b>58</b>	<b>8</b>	<b>13</b>	<b>94</b>	<b>36</b>	<b>14</b>	<b>8</b>	<b>6</b>	<b>6</b>	<b>10</b>	
<b>% of "Sign-offs" . . . . .</b>	<b>13</b>	<b>15</b>	<b>14</b>	<b>16</b>	<b>19</b>	<b>18</b>	<b>12</b>	<b>8</b>	<b>18</b>	<b>7</b>	<b>13</b>	<b>2</b>	<b>..</b>	

TABLE III  
STILLMAN INFIRMARY

LIST OF CASES, 1911-12

Abscess—miscellaneous . . . . .	13	Laryngitis . . . . .	4
“ peritonsillar . . . . .	6	Lumbago . . . . .	1
Appendicitis . . . . .	25	Malaria . . . . .	1
Bronchitis . . . . .	11	Measles . . . . .	2
Chicken-pox . . . . .	10	Miscellaneous Medical . . . . .	24
Colds—unclassified . . . . .	20	Miscellaneous Surgical . . . . .	88
Coryza . . . . .	5	Mumps . . . . .	3
Dementia Praecox . . . . .	1	Neuralgia . . . . .	1
Diarrhoea . . . . .	2	Pharyngitis . . . . .	5
Diphtheria . . . . .	12	Pleuritis . . . . .	2
Ear, of the . . . . .	6	Pneumonia . . . . .	1
Eye, of the . . . . .	2	Rheumatism . . . . .	9
Fractures . . . . .	6	Skin, of the . . . . .	4
General Debility . . . . .	17	Teeth, of the . . . . .	3
German Measles . . . . .	31	Tonsillitis . . . . .	64
Grippe . . . . .	47	Tuberculosis . . . . .	1
Heart, of the . . . . .	1	Typhoid . . . . .	1
Indigestion . . . . .	23	No diagnosis . . . . .	9
Infections—localized . . . . .	31		
Insomnia . . . . .	3	Total . . . . .	499
Jaundice . . . . .	4		
Room patients . . . . .			85
Ward patients . . . . .			414
Total . . . . .			499
Discharged—well . . . . .			310
“ relieved . . . . .			181
“ not relieved . . . . .			3
Died . . . . .			2
Transferred to other hospitals . . . . .			3
Total . . . . .			499
Total number of hospital days . . . . .			3,074
Daily average . . . . .			11.42
Total number of operations . . . . .			52
Operations for Appendicitis . . . . .			17

**TABLE IV**  
**STILLMAN INFIRMARY**  
**ABBREVIATED SUMMARY FOR THE TEN YEARS SINCE THE INFIRMARY**  
**WAS OPENED**

Academic Year	Total number Patients	Appendicitis	Operations for Appendicitis	Deaths from Appendicitis	Diphtheria	Deaths from Diphtheria	Pneumonia	Deaths from Pneumonia	Scarlet Fever	Deaths from Scarlet Fever	Typhoid Fever	Deaths from Typhoid Fever
1902-03	233	17	9	0	2	0	7	0	0	0	5	0
1903-04	290	19	10	2	0	0	5	2	0	0	2	0
1904-05	377	22	9	0	5	0	8	1	0	0	5	0
1905-06	432	27	21	1	29	0	0	0	6	0	1	0
1906-07	467	22	15	0	2	0	2	0	5	0	2	0
1907-08	541	27	16	0	5	0	4	0	23	1	2	0
1908-09	459	29	17	0	2	0	0	0	3	0	1	0
1909-10	575	26	19	0	3	0	5	1	3	0	0	0
1910-11	581	18	10	0	3	0	7	0	5	0	0	0
1911-12	499	25	17	0	12	0	1	0	0	0	1	0
<b>Total</b>	<b>4444</b>	<b>242</b>	<b>143</b>	<b>3</b>	<b>63</b>	<b>0</b>	<b>34</b>	<b>4</b>	<b>55</b>	<b>1</b>	<b>19</b>	<b>0</b>

Deaths from other causes were as follows :—

1904-05, 3; 1906-07, 1; 1909-10, 2; 1911-12, 2; making the total number of deaths, sixteen for the ten years.

The causes of the above-mentioned deaths were as follows :—

Auto accident, 1; cancer, 1; carbuncle, 1; cerebro-spinal meningitis, 1; endo- and pericarditis and meningitis, 1; septicaemia, 1; tuberculosis, 2.

Table V is a Summary of the more common contagious diseases for the last eighteen years.

**TABLE V**  
**PROPORTION OF FOUR CONTAGIOUS DISEASES FOR THE PAST**  
**EIGHTEEN YEARS**

	Diphtheria	Measles	Mumps	Scarlet Fever	Total
1894-95 . . . .	3	21	65	12	101
1895-96 . . . .	3	21	20	2	46
1896-97 . . . .	2	47	11	4	64
1897-98 . . . .	5	19	95	2	121
1898-99 . . . .	0	48	2	0	50
1899-1900 . . .	5	106	44	3	158
1900-01 . . . .	12	1	66	4	83
1901-02 . . . .	4	42	3	2	51
1902-03 . . . .	7	7	12	7	33
1903-04 . . . .	13	75	28	7	123
1904-05 . . . .	11	20	24	0	55
1905-06 . . . .	35	23	19	8	90
1906-07 . . . .	4	18	29	9	60
1907-08 . . . .	5	36	9	46	96
1908-09 . . . .	2	16	36	5	59
1909-10 . . . .	3	20	31	9	63
1910-11 . . . .	4	26	3	7	40
1911-12 . . . .	12	4	5	0	21

Table VI is given for comparison between the University and the City of Cambridge, but such comparison is made difficult because while the

**TABLE VI**  
**PROPORTION OF DIPHTHERIA, MEASLES, AND SCARLET FEVER**  
**FOR THE CITY OF CAMBRIDGE FOR THE PAST**  
**EIGHTEEN YEARS**

	Diphtheria	Measles	Scarlet Fever	Total
1894 . . . . .	176		901	1077
1895 . . . . .	573	249	293	1115
1896 . . . . .	455	288	198	941
1897 . . . . .	391	410	281	962
1898 . . . . .	152	58	122	327
1899 . . . . .	502	473	158	1133
1900 . . . . .	925	138	176	1239
1901 . . . . .	615	562	101	1278
1902 . . . . .	460	407	199	1066
1903 . . . . .	322	80	188	590
1904 . . . . .	330	481	135	946
1905 . . . . .	350	112	150	612
1906 . . . . .	517	681	166	1314
1907 . . . . .	323	60	414	797
1908 . . . . .	422	1197	495	2114
1909 . . . . .	278	542	365	1185
1910 . . . . .	310	287	349	946
1911 . . . . .	397	605	213	1215

University statistics in Table V are for the academic year, the statistics for the City of Cambridge are for the calendar year.

Mumps is not mentioned in Table VI, because the Cambridge Board of Health keeps no record of that disease.

**MARSHALL H. BAILEY, *Medical Adviser.***

## REPORT OF THE APPOINTMENT OFFICE

TO THE PRESIDENT OF THE UNIVERSITY:—

SIR,—The following Report, rendered by the Appointment Office, describes the work of that Office in 1911-12. The work consists of the recommendation of Harvard men (A) to fill *academic* positions in universities, colleges, schools, or institutions of research; (B) to fill positions *not academic*, including institutional, technical, or business positions. These recommendations may be made by the Chairmen or other representatives of the Divisions and Departments of the Faculty of Arts and Sciences, by the Deans of the Professional Schools,\* by the representatives of the Faculty in coöperation with the Office of the General Secretary of The Harvard Alumni Association, or by that Office independently.

In reading the following statement it must be remembered that there are doubtless many positions that have been filled through the influence of individual members of the Faculty which have never come to the attention of this Office.

The statistical tables indicate some interesting facts. The classification according to subject shows that by recommendation of the Faculty, 30 appointments as teacher of English were made. The Reports of the Appointment Office for the last six years show that the Department of English fills each year not less than 10 more positions than any other Department. In the year 1909-10, 27 teachers of English were placed, the next in number being History, 14. In 1910-11, an exceptional year both for demands and for candidates, appointments in English rose to 50; in History, to 15. In 1911-12 the numbers are: English, 30; History, 13; Biology, 12†; Greek and Latin, 9; German, 8; Chemistry, 8; Mathematics, 8; Philosophy and Psychology, 8.

In the table of the general summary, showing comparative figures, it appears that in 1911-12, 194 academic (teaching and research) appointments have been made as against 200 in 1910-11. The loss of 6 occurs in the university and college appointments, which in 1911-12 number 94 as against 122 in 1910-11. This difference in figures of 28 is due not to any noticeable shortage in the demands on the Faculty for such teachers, but to the fact that in 1910-11, when 122 college and university positions were filled by the Office, there was an unusually large registration of men ready to accept elementary instructorships. A large proportion of the calls from colleges and universities is for teachers of elementary classes at a salary of about \$1,000. The men registered for such positions are naturally candidates for the degree of Master of Arts, with an occasional unusually well-trained Senior. The disproportion between the men registered in any one year and the men placed is, therefore, readily explained by the fact that only a small number of the men registered can afford to be candidates for such modest college positions as are commonly offered. The majority of men registered in any year have positions already but hope for better ones. It is evident that there must be a variation from year to year in the number of college or university positions which the Appointment Office can fill, dependent on the number and type of grad-

\* No official report has been received from the Schools of Divinity, Law, Medicine, or Mining.

† In 1910-11 the Division of Biology filled 7 positions.

uate students, candidates for the higher degrees, or on the opportunities presented for transferring Harvard teachers already holding college or university appointments to higher posts. To some extent this condition of affairs affects the placing of men in technical positions through the various Scientific Departments. Even in this year, when statistics show a loss of 6, almost every Department placed all its newly registered men.

A cause for encouragement in the statistics of the present year is in the fact that the number of appointments in the public schools has risen from 13 in 1911 to 22 in 1912. The private school record is even more encouraging: 53 positions filled in 1912 as compared with 40 in 1911.

It is further noticeable in 1912 that 113 out of 194 academic appointments, or about 58%, are in the North Atlantic Section of the United States. Out of the 95 appointments not academic, 80, or about 85%, are in that same section. In 1911, out of 200 academic appointments, 97, or about 48%, were in the North Atlantic States, and out of 112 appointments not academic, 89, or about 79%, were in the same section.

The statistics concerning business positions reported by the Faculty and by The Harvard Alumni Association show 95 in 1912 as against 112 in 1911. Of these 95, 63 are reported by the Office of the Alumni Association and 32 by the Faculty, compared with 66 reported by the Alumni Association in 1911, and 46 by the Faculty in the same year. This variation in figures may be accounted for by the fact that 1911 was an unusually full year in all Departments, both for opportunities and for candidates, and also by the fact that the record of appointments submitted by the Chairmen may not cover all the positions filled. The decrease in the percentage of positions filled by The Harvard Alumni Association is due perhaps to several causes. There has been an increasing number of candidates for positions in manufacturing, mercantile, and publishing houses, and an insufficient number of such positions. The calls from the bond and brokerage concerns, however, have increased, while the number of applicants has steadily fallen off. At the same time it is interesting to note that there is a gain in 1912 of 5 insurance and 4 mercantile positions, 6 of the mercantile positions being in department stores, — a growing field for college men.

In 1912 the average salary reported for academic positions is \$1,382; in 1911 it was \$1,310; the average salary reported for a position not academic in 1912 is \$977; in 1911 it was \$888.

#### APPOINTMENTS

##### (A) ACADEMIC

###### (a) Teaching and Administrative

	Number of Positions	Number of Salaries Reported	Aggregate Salaries Reported
1. Universities or Colleges	94	83	\$114,425
2. Technical Schools . . . . .	9	8	11,116
3. Normal Schools . . . . .	4	3	2,150
4. Vocational School . . . . .	1	1	5,000
5. Public Schools . . . . .	22	20	27,550
6. Private or Endowed Schools	53	52	67,205
Total . . . . .	183	167	\$227,446



## Classification according to Subject and Department: —

1. SUBJECT		Number of Positions Filled
<b>GROUP I</b>		
Greek and Latin .....	2	
Latin .....	4	
with Ancient History .....	1	
with Ancient History and Mathematics .....	1	
with English .....	1	
with other subjects .....	1	
Roman Archaeology .....	1	
Greek .....	2	
with Latin and Ancient History .....	1	
with Ancient History .....	1	15
<hr/>		
English .....	30	
with Latin .....	2	
with Public Speaking .....	1	
with History .....	1	
with other subjects .....	2	36
<hr/>		
German .....	8	
with Latin .....	2	10
<hr/>		
French and German .....	5	5
<hr/>		
Romance Languages .....	4	
French .....	4	
with German and Latin .....	2	
with German, Latin, and English .....	1	
with German and Chemistry .....	1	
with English and History .....	1	
with Spanish .....	2	
with other subjects (baseball) .....	1	
Italian .....	1	17
<hr/>		
Fine Arts		
Architecture .....	1	
Landscape Gardening .....	1	2
<hr/>		
Music .....	2	2
<hr/>		
Carried forward .....		87

		Number of Positions Filled	
	Brought forward .....		87
<b>GROUP II</b>			
	Physics and Chemistry .....	6	
	Physics .....	1	
	Chemistry .....	8	15
		—	
	Engineering .....	2	2
		—	
	Biology .....	3	
	Botany .....	4	
	Zoölogy .....	3	
	with Embryology .....	1	
	Genetics .....	1	12
		—	—
	Geology .....	2	
	Economic Geology .....	1	3
		—	
	Natural History .....	1	1
		—	
<b>GROUP III</b>			
	History .....	13	
	with Government .....	1	14
		—	
	Economics .....	6	
	with Sociology .....	3	9
		—	
	Education and Psychology .....	1	1
		—	
<b>GROUP IV</b>			
	Philosophy and Psychology .....	1	
	Philosophy .....	4	
	Psychology .....	3	8
		—	
	Mathematics .....	8	
	with Science, Mechanical Drawing, and English .....	1	
	with Athletics .....	1	10
		—	
	Carried forward.....		162

		Number of Positions Filled
	Brought forward.....	162
OUT OF GROUP		
Business .....	1	1
	—	—
Commercial Subjects .....	1	1
	—	—
Manual Training .....	1	1
	—	—
General Combined Subjects .....	2	2
	—	—
Physical Training .....	1	1
with other subjects .....	3	4
	—	—

## 2. DEPARTMENT (ADMINISTRATIVE)

Principal .....	7	7
	—	—
Superintendent .....	2	2
	—	—
Assistant Superintendent .....	1	1
	—	—
Registrar .....	1	1
	—	—
Head of Junior Department of Boys' School .....	1	1
	—	—
Total .....	183	

## (b) Research

	Number of Positions	Number of Salaries Reported	Aggregate Salaries Reported
1. Economic .....	1	1	
	—	—	—
2. Educational .....	5	5	
	—	—	—
3. Sociological .....	2	2	
	—	—	—
4. Scientific			
Biology:			
Botany .....	1	1	
Zoölogy .....	1	2	
	—	—	—
5. Chemistry .....	1	1	
	—	—	—
Total .....	11	10	\$15,841

## (B) NOT ACADEMIC

	Number of Positions secured through		Number of Salaries Reported	Aggregate Salaries Reported
	Faculty	Harvard Alumni Association		
(a) Business				
1. Accounting and auditing . . . .		2 2	2	\$1,500
		—		
2. Banking and Brokerage				
Office . . . . .	2	2		
Advertising . . . . .	..	1 5	3	2,300
	—	—		
3. Engineering (Construction and Consulting) . . . . .	5	3 8	6	4,864
	—	—		
4. Forestry				
Consulting Foresters . . . .	4			
United States Forest Service . . . . .	2			
State Association . . . . .	1	7		
	—			
5. Insurance . . . . .		6 6	6	5,460
	—			
6. Journalism				
Editing . . . . .		3		
Advertising . . . . .		2 5	5	5,828
		—		
7. Architecture . . . . .	1	1		
	—			
8. Landscape Architecture . . . .	2	2	1	1,300
	—			
9. Manufacturing:				
Office and Manufacturing proper . . . . .	1	17		
Efficiency . . . . .	1	2		
Chemistry . . . . .	1	2 24	22	17,696
	—	—		
10. Mercantile:				
Wholesale . . . . .		5		
Retail (including Depart- ment Stores) . . . . .	3	3 11	11	6,136
	—	—		
11. Public Service Corporation				
Railroad (Engineering) .	4	3		
Telephone (Office) . . . .	1	3		
Municipal				
Engineering . . . . .	1			
Sewerage . . . . .	1	13	8	6,254
	—	—		
Carried forward . . . . .	30	54 84	64	\$51,338

## APPENDIX

		Number of Positions secured through			Number of Salaries Reported	Aggregate Salaries Reported
	Faculty	Harvard Alumni Association				
	Brought forward .....	30	54	84	64	\$51,338
12.	Publishing .....		2			
	Translating .....	1		3	3	4,340
		—	—			
13.	Real Estate .....		2	2	2	1,420
			—			
14.	Secretaryships					
	Executive					
	Learned Foundation ...	1				
	Public Library .....		1			
	Private					
	Diplomatic .....		2			
	Museum .....		1			
	State Reservation Com- mission .....		1	6	4	8,900
		—	—	—	—	—
		32	63	95	73	\$65,998

## (C) GEOGRAPHICAL DISTRIBUTION

	Universities Colleges	Technical Schools	Normal Schools	Vocational Schools	Public Schools	Private Schools	Research	Not Academic	Totals for States	Totals for Divisions
<b>NORTH ATLANTIC DIVISION:</b>										103
Maine .....	3	..	..	..	..	..	..	1	4	..
New Hampshire .....	2	..	..	..	..	6	..	..	8	..
Vermont .....	2	..	..	..	..	1	..	..	3	..
Massachusetts .....	11	5	..	..	12	13	6	62	109	..
Rhode Island .....	1	..	..	..	..	1	..	..	2	..
Connecticut .....	4	..	..	1	1	2	..	..	8	..
New York .....	11	..	..	..	..	7	3	13	34	..
New Jersey .....	1	..	..	..	2	3	..	1	7	..
Pennsylvania .....	9	1	..	..	..	5	..	3	18	..
<b>SOUTH ATLANTIC DIVISION:</b>										18
Maryland .....	..	..	..	..	..	1	..	1	2	..
District of Columbia .....	..	..	..	..	..	..	2	2	4	..
Virginia .....	3	..	..	..	..	..	..	..	3	..
West Virginia .....	..	..	1	..	..	..	..	..	1	..
North Carolina .....	3	..	..	..	..	1	..	2	6	..
South Carolina .....	..	..	..	..	..	1	..	..	1	..
Georgia .....	..	..	..	..	..	..	..	1	1	..
<b>SOUTH CENTRAL DIVISION:</b>										6
Tennessee .....	..	..	..	..	1	..	..	..	1	..
Texas .....	2	1	..	..	..	..	..	..	3	..
Arkansas .....	2	..	..	..	..	..	..	..	2	..
<b>NORTH CENTRAL DIVISION:</b>										42
Ohio .....	..	..	..	..	..	..	..	2	2	..
Indiana .....	2	..	1	..	2	..	..	..	5	..
Illinois .....	8	..	..	..	..	2	..	1	11	..
Michigan .....	..	..	..	..	..	..	..	2	2	..
Wisconsin .....	2	..	..	..	1	1	..	1	5	..
Minnesota .....	1	..	..	..	..	..	..	..	1	..
Iowa .....	2	..	..	..	1	..	..	..	3	..
Missouri .....	6	..	..	..	..	..	..	..	6	..
North Dakota .....	..	..	1	..	..	..	..	..	1	..
South Dakota .....	2	1	..	..	..	..	..	..	3	..
Kansas .....	2	..	..	..	1	..	..	..	3	..
<b>WESTERN DIVISION:</b>										22
Colorado .....	1	..	..	..	1	2	..	..	4	..
Arizona .....	..	..	..	..	..	1	..	..	1	..
Utah .....	1	1	..	..	..	..	..	..	2	..
Washington .....	3	..	..	..	..	..	..	..	3	..
Oregon .....	1	..	..	..	..	..	..	..	1	..
California .....	7	..	..	..	..	4	..	..	11	..
CUBA .....	..	..	..	..	..	..	..	1	1	1
CANADA .....	2	..	1	..	..	..	..	..	3	3
ENGLAND .....	..	..	..	..	..	..	..	1	1	1
GERMANY .....	..	..	..	..	..	2	..	..	2	2
AUSTRIA .....	..	..	..	..	..	..	..	1	1	1
<b>Total Positions .....</b>	<b>94</b>	<b>9</b>	<b>4</b>	<b>1</b>	<b>22</b>	<b>53</b>	<b>11</b>	<b>95</b>	<b>289</b>	<b>289</b>

## (D) SUMMARY OF APPOINTMENTS

Geographical Distribution	Academic 1912	Not Academic 1912	Academic 1911	Not Academic 1911
North Atlantic.....	113	80	97	89
South Atlantic .....	12	6	17	7
South Central .....	6	0	23	0
North Central .....	36	6	31	11
Western .....	22	0	20	1
Dependencies .....	0	1	3	1
Foreign Countries .....	5	2	9	3
	—	—	—	—
	194	95	200	112
	—	—	—	—
Total .....		289		312
Aggregate Salaries .....	\$243,087	\$65,598	\$229,821	\$76,992

L. B. R. BRIGGS, *Dean,*  
*Faculty of Arts and Sciences.*

E. H. WELLS, *General Secretary,*  
*The Harvard Alumni Association.*

## REPORT OF THE SECRETARY FOR STUDENT EMPLOYMENT

The following report, submitted by the Secretary of the Students' Employment Office, describes the work of that Office in 1911-12.

The office undertakes to recommend Harvard students and graduates as tutors, or for such part time work as is available in and about Cambridge. It also endeavors, as far as possible, to increase the demand for this work. It is essential that students who secure employment render punctual and efficient service, and it is the policy of the Office to recommend for positions men who by their knowledge, experience, and personality are best qualified to fill them, regardless of the fact that there may be other men of less ability more in need. Experience shows that many positions are lost either through inefficient work or through the unbusiness-like attitude of students toward their employers and the Office.

In comparison with 1910-11, the following figures show an increase of 41 men employed and a decrease of about \$6,000 in the amount earned.

	1910-11	1911-12
Men registered for term-time work .....	599	559
Men who secured term-time work .....	272	306
Men registered for summer work .....	638	611
Men who secured summer work .....	138	145
Total registration for term-time and summer work, allowing for men registered for both .....	1021 *	1015 *

A decrease of 6 men registered and an increase of 41 employed.

The division of registration among the different Departments of the University is as follows:—

College .....	687	Dental .....	14
Medical .....	42	Scientific .....	32
Law .....	92	Special .....	9
Graduate .....	113	Unclassified .....	8
Business .....	6	Assistants .....	6
Divinity .....	6		
		Total .....	1015

\* 1910-11.....216 duplicate registrations

1911-12.....155 duplicate registrations



Men employed and amount earned through the aid of the Students' Employment Office, the Departments of the University, and The Harvard Alumni Association: —

	Men employed	Amount earned	
		1910-11	1911-12
Term-time .....	278	63,263.29	.....
Term-time .....	312 *	.....	56,773.01
Summer, 1911 .....	157	23,568.64	.....
Summer, 1912 .....	157 †	.....	23,769.66
		<hr/>	<hr/>
		86,831.93	80,542.67
Amount reported independently earned during year .....		31,823.55	27,169.29
		<hr/>	<hr/>
		118,655.48	107,711.96

\* 306 men employed through the aid of the Office.

6 men employed through the aid of the Departments of the University and The Harvard Alumni Association.

† 145 men employed through the aid of the Office.

12 men employed through the aid of Departments of the University and The Harvard Alumni Association.

The following table shows the number of temporary positions filled — 2,455 in all — through the aid of the Office, the Departments of the University, and The Harvard Alumni Association:—

Agent .....	8	Library Messenger .....	1
Assistant .....	2	Literary Work .....	2
Attendant .....	6	Model .....	4
Bath-house Employee .....	1	Monitor .....	479
Boatman .....	3	Musician .....	8
Book-keeper .....	1	Newspaper Correspondent ....	1
Boy Scout Leader .....	1	Night School Teacher .....	4
Camp Councillor .....	10	Office Boy .....	1
Canvasser, Solicitor .....	4	Organiser .....	1
Caretaker .....	1	Playground Director .....	3
Cataloguer .....	3	Proctor .....	92
Chauffeur .....	4	Proof-reader .....	2
Chemist .....	1	Pylon Man .....	1
Choreman .....	54	Reader .....	5
Clerk .....	115	Room for Services .....	6
Club Employee .....	1	Salesman .....	5
Coach .....	8	Scene Shifter, Chair Mover ...	5
Companion .....	21	Secretary .....	7
Computer .....	4	Settlement Worker .....	4
Conductor .....	1	Stenographer .....	26
Draftsman .....	12	Substitute for Schools .....	5
Electrician .....	2	Supernumerary .....	2
Engineer .....	2	Supervisor of Study .....	20
Entertainer .....	1	Supervisor and Tutor .....	1
Errandman .....	50	Surveyor .....	2
Expressman .....	1	Teacher in Chemistry .....	1
Farm Hand .....	2	Ticket Taker .....	589
Gardener .....	3	Telegraph Operator .....	1
Gate Keeper, Guard, Usher ...	3	Translator .....	9
General Man on Estate .....	9	Tutor and Companion .....	31
Guide .....	447	Tutor .....	95
Hotel Employee .....	8	Typewriter .....	132
Ice Man .....	1	Waiter .....	109
Illustrator .....	1	Watchman .....	2
Inspector .....	2		
Janitor .....	2		
Library Work .....	4	Total .....	2,455

## TERM-TIME EMPLOYMENT

October 2, 1911 — June 29, 1912

Positions	No. of positions	Amount	No. of men employed	Avg. amt. earned per man
Agent .....	3	\$44.00	4	\$11.00
Attendant .....	3	377.00	4	94.25
Canvasser, Solicitor .....	4	90.83	22	4.13
Cataloguer .....	3	91.50	2	45.75
Chauffeur .....	1	240.00	1	240.00
Choreman .....	46	561.49	28	20.06
Civil Engineer .....	1	210.00	1	210.00
*Clerk <sup>1</sup> .....	103	1,120.01	87	12.87
Coach .....	7	1,052.00	7	150.28
Companion .....	6	1,218.00	6	203.00
Computer .....	4	70.55	4	17.64
*Draftsman .....	10	196.50	7	28.07
Electrician .....	1	2.00	1	2.00
Entertainer .....	1	10.00	2	5.00
Errandman .....	47	46.13	33	1.40
Expressman .....	1	19.00	2	9.50
Gate Keeper .....	3	269.60	13	20.74
*General Man .....	4	951.00	4	237.75
Guide .....	133	145.15	25	5.80
Hotel Employee .....	1	712.50	1	712.50
Inspector .....	2	95.00	3	31.67
Janitor .....	2	343.00	2	171.50
Library Messenger .....	1	135.00	1	135.00
*Library Work .....	3	335.00	3	111.67
Literary Work .....	2	70.00	2	35.00
Model .....	4	62.50	4	15.63
Monitor .....	479	1,333.60	13	102.97
Musician <sup>1</sup> .....	7	107.00	7	15.29
Night School Teacher .....	4	478.00	6	79.66
Organiser .....	1	15.00	1	15.00
Proctor .....	92	2,775.77	102	27.21
Proof-reader .....	1	140.00	3	46.67
Reader .....	4	11.70	3	3.90
Room for Services .....	6	873.00	6	145.50
Salesman .....	5	128.50	12	10.71
Scene Shifter and Chair Mover .....	5	31.23	10	3.13
Secretary .....	6	1,776.62	8	222.08
Settlement Worker .....	4	2,442.00	4	610.50
Stenographer .....	20	720.50	3	90.06
*Substitute for School .....	5	443.00	5	88.60
Supernumerary .....	2	5.00	10	.56
Supervisor .....	20	1,130.00	16	70.63
Supervisor and Tutor .....	1	1,800.00	1	1,800.00
Surveyor .....	2	508.00	3	169.33
Teacher in Chemistry .....	1	310.00	1	310.00
Ticket Taker .....	550	896.75	8	112.09
Translator .....	6	323.00	6	53.83
Tutor <sup>1</sup> .....	59	6,892.99	49	140.67
Tutor and Companion .....	16	14,291.20	16	893.20
Typewriter .....	126	1,174.80	24	48.95
Waiter .....	108	9,691.29	108	89.73
	1,926	\$56,773.01		

<sup>1</sup> Statistics compiled on number who reported only. Seven men have not reported.

\* Six positions filled by the Departments of the University or The Harvard Alumni Association.

**SUMMER EMPLOYMENT**  
July 1, 1912 — September 30, 1912

Positions	No. of positions	Amount	No. of men employed	Avg. amt. earned per man
Agent .....	5	\$317.20	9	\$35.24
*Assistant .....	2	450.00	2	225.00
Attendant .....	3	312.00	3	104.00
Bath House Employee .....	1	115.00	1	115.00
Boatman .....	3	381.17	3	127.06
*Boy Scout Leader .....	1	100.00	1	100.00
Book-keeper .....	1	73.32	1	73.32
Camp Counsellor .....	10	2,014.00	10	201.40
Caretaker .....	1	126.50	1	126.50
*Chauffeur .....	3	315.00	3	105.00
*Chemist .....	1	76.00	1	76.00
Choreman <sup>1</sup> .....	8	97.33	11	8.85
*Clerk <sup>1</sup> .....	12	608.60	12	50.72
Club Employee .....	1	336.00	2	168.00
Coach .....	1	255.00	1	255.00
Companion <sup>1</sup> .....	15	4,078.50	16	254.90
Conductor <sup>1</sup> .....	1	110.25	1	110.25
*Draftsman <sup>1</sup> .....	2	325.00	2	162.50
Electrician .....	1	108.00	1	108.00
*Engineer .....	1	24.00	1	24.00
Farm Hand .....	2	135.00	2	67.50
Gardener .....	3	200.65	3	66.88
General Man on Estate .....	5	493.13	4	123.78
Guides .....	314	861.56	6	143.59
Hotel Employee .....	7	878.00	9	97.55
Ice Man .....	1	80.00	1	80.00
Illustrator .....	1	60.00	1	60.00
Library Work .....	1	121.50	1	121.50
Messenger .....	3	106.75	7	15.25
Musician .....	1	5.00	1	5.00
*Newspaper Work .....	1	2.00	1	2.00
Office Boy .....	1	10.75	1	10.75
Playground Director .....	3	310.00	4	77.50
Proof-reader .....	1	7.13	1	7.13
Pylon Men .....	1	105.00	10	10.50
Reader .....	1	34.00	1	34.00
*Secretary .....	1	418.50	1	418.50
*Stenographer .....	6	296.15	4	74.04
*Telegraph Operator .....	1	467.00	1	467.00
Ticket Taker .....	39	200.00	48	4.17
Translator .....	3	128.50	3	42.83
Tutor <sup>1</sup> .....	36	2,963.25	28	106.90
Tutor and Companion .....	15	5,494.92	15	366.33
Typewriter .....	6	145.50	4	36.37
Waiter .....	1	2.50	1	2.50
Watchman <sup>1</sup> .....	2	..	..	..
	529	\$23,769.66		

<sup>1</sup> Statistics compiled upon number of men who reported only. Seven men have not reported.

\* Twelve positions filled by the Departments of the University or The Harvard Alumni Association.

MORRIS GRAY, JR.,  
*Secretary for Student Employment.*

## ORDINARY DEGREES CONFERRED, 1908-12

	1908	1909	1910	1911	1912
Bachelors of Arts . . . . .	379	421	453	414	419
Bachelors of Arts out of course . . . . .	60	73	52	62	57
Bachelors of Science . . . . .	50	60	57	44	52
Bachelors of Science out of course . . . . .	10	13	12	25	8
Bachelors of Divinity . . . . .	12	12	6	6	3
Bachelors of Laws . . . . .	159	163	182	168	186
Bachelors of Laws out of course . . . . .	13	14	11	13	13
Doctor of Law . . . . .	0	0	0	0	1
Bachelors of Agricultural Science . . . . .	7	5	1	0	0
Bachelors of Agricultural Science out of course . . . . .	0	0	1	0	0
Doctors of Public Health . . . . .	0	0	0	2	3
Doctors of Medicine . . . . .	69	55	73	85	60
Doctors of Medicine out of course . . . . .	2	3	0	2	1
Doctors of Dental Medicine . . . . .	18	10	24	12	23
Doctors of Dental Medicine out of course . . . . .	0	5	0	0	0
Doctor of Veterinary Medicine out of course . . . . .	0	0	0	0	1
Masters of Arts . . . . .	116	112	142	163	131
Masters of Arts out of course . . . . .	8	7	0	0	0
Masters of Science . . . . .	4	3	4	0	0
Doctors of Philosophy . . . . .	43	38	37	41	33
Doctors of Science . . . . .	0	0	0	1	3
Metallurgical Engineers . . . . .	0	0	0	1	0
Mining Engineers . . . . .	3	5	3	3	4
Masters in Civil Engineering . . . . .	1	2	1	5	5
Masters in Mechanical Engineering . . . . .	3	0	4	1	1
Masters in Electrical Engineering . . . . .	1	3	4	3	3
Masters in Electrical Engineering out of course . . . . .	0	0	1	0	0
Masters in Architecture . . . . .	1	2	2	0	2
Masters in Landscape Architecture . . . . .	1	0	1	4	4
Masters in Forestry . . . . .	4	5	3	5	5
Masters in Forestry out of course . . . . .	0	0	0	1	0
Masters of Science in Botany . . . . .	0	0	0	3	1
Masters of Science in Chemistry . . . . .	0	0	0	1	1
Master of Science in Geology . . . . .	0	0	0	0	1
Masters of Science in Zoölogy . . . . .	0	0	0	1	3
Masters in Business Administration . . . . .	0	0	3	3	3
Master in Business Administration out of course . . . . .	0	0	0	0	1
Totals . . . . .	964	1011	1081	1084	1048
<hr/>					
Commencement Certificates . . . . .	1	1	1	1	0

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## TREASURER'S STATEMENT FOR 1911-12

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TO THE BOARD OF OVERSEERS OF HARVARD COLLEGE:—

The Treasurer submits the annual statement of the financial affairs of the University, for the year ending June 30, 1912.

The net income of the general investments for this period was divided at the rate of 4.95 per cent among the Funds to which these investments belong.

From the income of all bonds bought at a premium for general investments \$7,766.36 was credited to the various accounts concerned, and for special investments \$594.81, as the fair yearly repayment to make good the premiums at the maturity of the bonds.

CHARLES F. ADAMS, 2d, *Treasurer*.

Boston, November, 1912.

**BALANCE SHEET**

June 30, 1912

**EXHIBIT A****ASSETS****CASH IN BANKS:**

Bursar, . . . . .	\$46,517.88	
Treasurer—General, . . . . .	176,388.07	
Treasurer—Special—Schedule 1, . . . .	<u>433.80</u>	\$223,298.70

**ACCOUNTS RECEIVABLE:**

Term Bills of January, 1912, . . . . .	\$841.22	
Term Bills of June, 1912, . . . . .	105,968.19	
Sundry accounts of Bursar's office, . . . .	9,088.51	
Interest accrued, . . . . .	<u>4,638.31</u>	120,526.23

**INVENTORY—Stores, . . . . .** 10,488.72

**INSURANCE UNEXPIRED, . . . . .** 26,784.18

**INVESTMENTS:**

Securities—Special—Schedule 1, . . . .	\$2,469,684.78	
Securities—General—Schedule 2, . . . .	18,631,588.70	
Land and Buildings—Special—Schedule 1, . . . .	1,465,926.72	
Land and Buildings—General—Schedule 3, . . . .	<u>3,301,666.87</u>	25,868,867.02

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**\$26,249,949.85**

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**EXHIBIT A****BALANCE SHEET**

June 30, 1912

**LIABILITIES****ACCOUNTS PAYABLE:**

Salaries, . . . . .	\$165,112.08	
Deposits and Advance Payments, . . . . .	14,400.96	\$179,513.04

**CAPITAL:**

Gains and Losses for General Investments, . . . . .		555,647.48
Income on General Investments Unapportioned, . . . . .		4,881.67
Funds and Gifts, July 1, 1911, . . . . .	\$24,323,194.54	
General Suspense, July 1, 1911, . . . . .	196,587.74	

\$24,126,606.80

Gifts for Capital — Exhibit D, \$932,409.21

Gains and losses in valuation  
of Special Investments, . . . . . 41,726.09Unexpended balances of new  
gifts for buildings, . . . . . 443,282.78

Other capital receipts, . . . . . 886.08

\$1,418,304.16Less expenditures charged to  
capital account, . . . . . 8,584.59\$1,409,719.57Expenditures charged to Gen-  
eral Suspense, . . . . . 9,730.79 1,399,988.78\$25,526,595.58

General Deficit — Exhibit B, . . . . . 16,187.92

Funds and Gifts — June 30, 1912,  
Schedule 4, . . . . . \$25,752,720.89General Suspense, Credit  
Balances, June 30, 1912,  
Schedule 5, . . . . . 138,485.06\$25,886,155.45

Less General Suspense, Debit

Balances, June 30, 1912,  
Schedule 6, . . . . . 375,747.79 \$25,510,407.66 25,510,407.66\$26,249,949.85

**EXHIBIT B****CONSOLIDATED STATEMENT OF INCOME AND  
EXPENDITURE**

For the year ended June 30, 1912

**INCOME****RESTRICTED INCOME:****From SPECIAL INVESTMENTS,**

Interest and Dividends—Schedule 1, . . . . .	\$108,038.01	
Rents of Land and Buildings, . . .	\$153,390.54	
Less Operating Expenses, . . .	89,549.09	63,841.45
Net income—Schedule 1, . . . . .		\$171,879.46

**From GENERAL INVESTMENTS,****Interest and Dividends on**

Securities—Schedule 2, . . . . .	\$797,636.32	
Bank Balances, . . . . .	3,512.26	
Advances to Departments and		
Miscellaneous, . . . . .	15,688.04	\$816,836.52

Rents of Land and Buildings, . . .	\$306,726.12	
Less Operating Expenses, . . .	97,752.46	

Net Income—Schedule 3, . . . . . 208,973.66

Total Income General Investments, . . . \$1,025,810.18

Amount of Income unapportioned during  
previous years, now used, . . . . . 1,255.98

Amount from General Investments appor-  
tioned, . . . . . 1,027,066.16

Gifts for Immediate Use—Exhibit E, . . . . . \$771,772.20

Less Unexpended balances of new gifts for  
buildings, added to Funds and Gifts—

Exhibit A, . . . . . 443,282.78 328,489.42

Miscellaneous income, . . . . . 53,656.07

**GENERAL INCOME:**

Tuition Fees, . . . . .	\$670,890.88	
Laboratory Fees, . . . . .	36,789.31	
Other Fees, . . . . .	66,502.31	
Gross Rents of College Dormitories, etc. . . . .	88,915.16	
Miscellaneous income, . . . . .	*114,976.92	978,074.58

\$2,559,165.69

General Deficit to Exhibit A, . . . . . 16,187.92

\$2,575,353.61

\* Included in this amount is \$71,695.58 received by the Graduate School of Applied Science from Harvard College—see contra.

**EXHIBIT B****CONSOLIDATED STATEMENT OF INCOME AND  
EXPENDITURE**

For the year ended June 30, 1912

**EXPENDITURE****From RESTRICTED INCOME for:**

Administrative Purposes, . . . . .	\$5,501.24	
Educational Purposes, . . . . .	453,940.44	
Other Activities, . . . . .	604,496.73	
Aids, . . . . .	<u>177,426.81</u>	\$1,241,865.22

**From GENERAL INCOME for:**

Administrative Purposes, . . . . .	\$92,526.01	
Educational Purposes, . . . . .	*985,517.02	
Other Activities, . . . . .	94,897.02	
Aids, . . . . .	<u>14,575.00</u>	1,187,515.05
Repairs and equipment of College dormitories, .	\$16,845.90	
Caretaking and operating expenses of College dormitories, . . . . .	<u>31,187.09</u>	47,532.99
Repairs and equipment of land and buildings for general purposes, . . . . .	\$25,034.81	
Caretaking and operating expenses of land and buildings for general purposes, . . . . .	<u>73,905.54</u>	98,940.35

\$2,575,853.61

\* Included in this amount is \$71,695.58 paid by Harvard College to the Graduate School of Applied Science — see contra.

# INCOME AND EXPENDITURE

For the year ended

	INCOME		
	Restricted	General	Total
University (Sch. 7), . . . . .	\$65,996.83	\$10,662.07	\$76,658.90
College, including Graduate School of Arts and Sciences (Sch. 8), . .	480,215.25	559,227.63	1,039,442.87
Library (Sch. 9), . . . . .	78,947.12	1,481.26	75,428.38
Summer Schools (Sch. 11), . . . .	882.33	23,868.47	24,750.80
Graduate School of Applied Science (Sch. 12), . . . . .	183,726.61	96,761.98	230,488.59
Graduate School of Business Adminis- tration (Sch. 13), . . . . .	30,122.23	10,641.40	40,763.63
Divinity School (Sch. 14), . . . .	36,658.22	8,558.83	45,217.05
Law School (Sch. 15), . . . . .	36,154.69	119,360.25	155,514.94
Medical School (Sch. 16), . . . . .	197,693.73	93,943.07	291,636.80
Graduate School of Medicine (Sch. 17),	.....	.....	.....
Dental School (Sch. 18), . . . . .	3,277.40	32,938.82	36,216.22
Bussey Institution (Sch. 19), . . . .	13,504.92	107.50	13,612.42
Arnold Arboretum (Sch. 20), . . . .	55,284.88	.....	55,284.88
Botanic Garden (Sch. 21), . . . . .	8,112.05	.....	8,112.05
Botanical Museum (Sch. 22), . . . .	2,583.26	.....	2,583.26
Gray Herbarium (Sch. 23), . . . . .	18,662.50	.....	18,662.50
Observatory (Sch. 24), . . . . .	53,217.70	.....	53,217.70
Museum of Comp. Zoology (Sch. 25),	46,859.33	.....	46,859.33
Peabody Museum of American Archae- ology and Ethnology (Sch. 26), . .	16,410.22	.....	16,410.22
Semitic Museum (Sch. 27), . . . . .	769.99	.....	769.99
Germanic Museum (Sch. 28), . . . .	4,543.91	.....	4,543.91
William Hayes Fogg Art Museum (Sch. 29), . . . . .	18,742.90	.....	18,742.90
Appleton Chapel (Sch. 30), . . . . .	10,320.62	.....	10,320.62
Phillips Brooks House (Sch. 31), . .	1,703.74	.....	1,703.74
Hemenway Gymnasium (Sch. 32), . .	.....	2,118.50	2,118.50
Stillman Infirmary (Sch. 33), . . . .	4,085.02	18,404.81	22,489.83
Funds and Gifts for Special Purposes (Sch. 34), . . \$710,898.94			
Less Unexpended balances of new gifts for buildings, 443,282.78	267,616.16	.....	267,616.16
Less Deficit of Hemenway Gymnasium included in the above expenditure of other departments and deducted to show the total net expenditure :			
	<u>\$1,581,091.11</u>	<u>\$978,074.58</u>	<u>\$2,559,165.69</u>

# EXHIBIT C

## BY DEPARTMENTS

June 30, 1912

EXPENDITURE	GENERAL		Disposition of General Deficit or Surplus			
	Deficit	Surplus	FUNDS AND GIFTS		GENERAL SUSPENSE	
			Debit	Credit	Debit	Credit
\$41,137.52	.....	\$35,521.38	.....	\$35,521.38	.....	.....
1,008,238.77	.....	31,204.10	\$18,084.57	50,125.64	\$4,618.63	\$3,781.66
130,542.38	\$55,114.00	.....	55,707.06	1,963.40	1,628.94	258.60
23,597.20	.....	1,158.60	.....	61.08	.....	1,092.52
231,544.96	1,056.37	.....	7,402.11	6,378.23	409.26	376.77
37,995.94	.....	2,767.69	145.00	1,983.67	46.63	975.65
51,972.39	6,755.34	.....	1,200.00	1,422.21	6,977.55	.....
172,141.91	16,626.97	.....	5,565.56	2,360.20	13,421.61	.....
281,469.81	.....	10,166.99	10,800.05	23,436.49	3,715.47	746.02
1,129.89	1,129.89	.....	.....	.....	1,129.89	.....
40,514.06	4,297.84	.....	1,046.29	580.50	3,832.05	.....
18,759.54	5,147.12	.....	.....	.....	5,147.12	.....
54,897.74	.....	886.64	2,435.07	3,321.71	.....	.....
7,009.22	.....	1,102.83	.....	31.23	.....	1,071.60
3,574.55	991.29	.....	.....	.....	991.29	.....
16,582.11	.....	2,080.39	.....	.....	.....	2,080.39
57,028.71	3,811.01	.....	4,910.32	1,800.47	701.16	.....
56,724.54	9,865.21	.....	8,892.45	580.76	1,553.52	.....
13,552.14	.....	2,858.08	.....	833.57	185.23	2,209.74
3,437.17	2,667.18	.....	2,667.18	.....	.....	.....
1,402.91	.....	3,141.00	.....	2,658.40	.....	482.60
4,947.21	.....	13,795.69	213.43	13,714.31	.....	294.81
9,950.09	.....	370.53	.....	188.44	.....	182.09
1,562.33	.....	141.41	209.40	350.81	.....	.....
12,058.00	.....	.....	.....	.....	.....	.....
21,803.55	.....	686.28	.....	401.09	.....	285.19
282,218.47	14,602.31	.....	49,059.67	40,216.08	5,758.72	.....
\$2,585,293.11						
9,939.50						
\$2,575,353.61	\$122,064.53	\$105,876.61	\$167,888.16	\$187,929.67	\$50,117.07	\$18,837.64
	105,876.61			167,838.16	18,837.64	
	\$16,187.92			\$20,091.51	\$36,279.43	



**GIFTS FOR CAPITAL**

June 30, 1912

**ESTABLISHING NEW FUNDS OR INCREASING OLD ONES**

From George R. Agassiz, \$50,000, for the general use of the Museum of Comparative Zoölogy.

From an anonymous giver, \$30,000, for the Harvard Foundation for exchanges with Sorbonne and Universities of France.

From an anonymous giver, \$5,000, "In Memory of Lawrence Carteret Fenno," to establish a fund for the treatment of cancer by "Light" rays, at the Collis P. Huntington Memorial Hospital.

From an anonymous giver, \$5,000, to establish the "Lawrence Carteret Fenno Memorial Free Bed Fund" in the Collis P. Huntington Memorial Hospital.

For addition to the principal of the Fund for the Professorship of Hygiene, \$10,000, from the anonymous founder of this Fund.

From the Trustees of the estate of Edward Whitney, \$1,000, to be used in protecting and providing suitable housing for birds in the Arnold Arboretum.

From Benjamin F. Keith, \$120, for the Arnold Arboretum Fund.

From the estate of Walter Farnsworth Baker, of the Class of 1893, of Boston, Mass., \$2,506.33 in cash, and securities valued at \$2,644, on account of his unrestricted bequest "to the corporation of Harvard University to be used for any purpose to help my beloved Alma Mater," . . .

From the estate of Caroline M. Barnard (Mrs. Robert M. Barnard), of Everett, Mass., \$24,000 additional, on account of her bequest as follows: "The balance, if any, remaining after these payments, I give and devise to the several Benevolent, Religious, Charitable and Educational Institutions, Corporations and Societies named as Beneficiaries in this my said Will . . . to be shared by them pro rata; that is to say, in the proportion which

the respective bequests, hereinbefore given to each, bear to the total amount of all the bequests to said several Societies, Institutions, and Corporations . . ."

From the estate of Lydia Augusta Barnard (Mrs. James Munson Barnard) of Milton, Mass., \$25,000, on account of her bequest to the President and Fellows of Harvard College, "to be kept as a separate and distinct fund to be known as the 'James and Augusta Barnard Law Fund,' the net income of the fund to be expended by them for the advancement, improvement and study of jurisprudence, legislation, administration and allied subjects in the United States of America when and where and in the manner they shall think best and, if they deem advisable, for the purchase of law books for the law library of said College; . . ."

From the estate of Henry Pickering Bowditch, of the Class of 1861, of Jamaica Plain, Mass., \$4,000, to be added to the J. Ingersoll Bowditch Fund, "the income of which shall be expended under the direction of the Professor of Physiology for the promotion of original investigation in the Physiological laboratory of the Harvard Medical School, with special power to use the income . . . for the purchase of books."

To be added to the endowment fund of the Collis P. Huntington Memorial Hospital, from

Additional subscriptions received through	
Dr. J. Collins Warren . . . . .	\$6,953.27
Anonymous . . . . .	2,816.97
	<hr/>
	\$9,770.24

From Thomas W. Lamont, \$250, to be added to the maintenance fund of the Collis P. Huntington Memorial Hospital.

From George P. Castle and family, \$5,000, in memory of Walter Remsen Brinckerhoff, to establish a fund in the Harvard Medical School to be known as the "Brinckerhoff Fund," the income to be used under the direction of the Shattuck Professor of Pathological Anatomy for the promotion of medical knowledge.

From members of the Class of 1881, \$60, to be added to the "Twenty-fifth Anniversary Fund of the Class of 1881."

From members of the Class of 1882, \$3,045.88, to be added to the Fund of the Class of 1882, established on the twenty-fifth anniversary of their graduation.

From members of the Class of 1883, \$100, to be added to the "Class of 1883 Fund," established on the twenty-fifth anniversary of their graduation.

From members of the Class of 1884, \$1,500, the final payment on account of their gift of \$100,000, to be added to the "Class of 1884 Fund," established on the twenty-fifth anniversary of their graduation.

From members of the Class of 1887, to commemorate the twenty-fifth anniversary of their graduation, \$100,000, to establish the "Class of 1887 Fund, the income only to be used and that only for the general purposes of the College as distinguished from the graduate schools and special departments of the University."

From William J. Riley, in memory of his nephew Clement Harlow Condell, of the Class of 1907, and later a student in the Law School, \$25,000, "to be perpetually held in trust, the income to be applied to such scholarship or scholarships as may from time to time be approved by you (the President and Fellows), such scholarship or scholarships to be known and designated as the 'Clement Harlow Condell Scholarship.' "

From Edmund Cogswell Converse, \$125,000, to establish "The Edmund Cogswell Converse Professorship of Banking" in the Graduate School of Business Administration. "The income only of this fund shall be used to maintain a Professorship in the Graduate School of Business Administration so long as that School endures, and thereafter in the College for similar purposes. It is my desire that this Professor shall give instruction and conduct or promote investigations in the subject of banking and finance. While it is my desire that this income shall ordinarily secure the services of an eminent instructor, it is also my desire to promote teaching and research, and if for any reason the Professorship should be temporarily vacant, or in the discretion of the President and Fellows it should be unnecessary to apply the entire income of this fund to maintain the Professorship, the

President and Fellows are authorized to use the income in securing instruction and research in the subjects named in such way as they see fit."

From Archibald Cary Coolidge and Clarence Leonard Hay, \$500, to be added to "The Archibald Cary Coolidge and Clarence Leonard Hay Fund," the income to be used for the purchase of books relating to South America, for the College Library, with the right to withdraw the whole or such part of the principal as may be necessary for the purchase of any library or collection of books on South America.

To establish the Thomas Dwight Memorial Fund, "the income only to be used for anatomical research under the direction of the Department of Anatomy at the Harvard Medical School and with the express stipulation that no part of this income shall be applied directly or indirectly to diminish the amount which would otherwise and without this fund be appropriated for the maintenance of the Department of Anatomy aforesaid," from

George R. Agassiz . . . . .	\$1,000
Walter C. Baylies . . . . .	200
Alexander Cochrane . . . . .	500
Charles C. Jackson . . . . .	100
Augustus Hemenway . . . . .	250
Horatio A. Lamb . . . . .	100
George Wigglesworth . . . . .	100
Moses Williams . . . . .	75
	<hr/>
	\$2,325

From five anonymous givers, \$115 additional, to be added to the Harvard Dental Alumni Endowment Fund.

From W. Vernon Ryder, \$20, to be added to the endowment fund for the benefit of the Harvard Dental School, to be used for education, research, or the general expenses of the Infirmary.

From Waldo E. Boardman, \$50, to be applied to the Dental School Endowment Fund of the Class of 1886.

From William F. Drea, \$10 additional, towards the Class of 1909 Dental Endowment Fund.

From the estate of Calvin and Lucy Ellis, additional securities valued at \$1, to be added to the Calvin and Lucy Ellis Aid Fund.

From the estate of Miss Harriet E. Goodnow, of Sterling, Mass., \$50,000, on account of her bequest "in memory of Reverend Josiah Kendall Waite, Esther Kendall Waite, Catherine A. Goodnow and Lucy Ann Waite . . . to be held in trust and known as the 'Waite Memorial Fund,' the income to be added to and become a part of the principal until the principal amounts to one hundred and fifty thousand dollars, and thereafter the income only to be used in assisting worthy, poor young men of any denomination, desiring a college education at Harvard College ; . . ."

From the estate of Rebecca A. Greene (Mrs. Francis B. Greene), of Dartmouth, Mass., \$28,500 additional, for the use of the Medical School.

To be added to the fund established by friends and former pupils, in memory of Professor Charles Gross, \$10.05, the income of the fund to be used for the purchase of books on English History, especially in those branches of the subject in which Professor Gross's studies lay.

From the estate of Charles L. Hancock, \$28.55 additional, to be added to the Charles L. Hancock Fund.

To be added to the Harvard Edda Club Scholarship Fund for Scandinavian students, from

The Harvard Edda Club . . . . .	\$170.00
Swedish Society Vega, of Boston . . . . .	50.00
Vasa Orden af Amerika, Logen Sofia No. 94 . . . . .	17.52
	<hr/>
	\$237.52

Through the Harvard Medical Alumni Association, \$500, to be added to the principal of the Harvard Medical Alumni Fund, established in 1907 by the Association. The income of the Fund is to added to the principal, or applied to increase the salary of one or more of the younger instructors in the Medical School, or to be applied otherwise in accordance with the wishes of the Association.

To "commemorate the life and work of Richard Hodgson, M.A., LL.D. (Melbourne), A.B., A.M. (Cambridge), who was born in Melbourne, Australia, in 1855, and who served as secretary of the American Society for Psychical Research and of the Ameri-

can Branch of the English Society for Psychical Research successively from 1887 until his death in Boston in 1905, devoting throughout those years a generous character and rare abilities to the investigation and study of phenomena which purported to furnish evidence of human immortality," the contributors "realize that enquiries of the kind with which Richard Hodgson's work in psychical research especially identified him may from time to time be most profitably pursued in ways not now predictable, and they desire to establish a fund for the encouragement of such work that may be broadly administered and that shall thus become a fitting and permanent tribute to his memory.

Accordingly the contributors direct that the fund shall be known as the Richard Hodgson Memorial Fund and that, subject only to the provisions for permitting accumulations hereinafter named, the income shall be expended in the sole discretion of the President and Fellows in any manner designed to encourage the investigation and study of mental or physical phenomena the origin or expression of which appears to be independent of the ordinary sensory channels.

The contributors further direct that one third, but not more, of the annual income of the fund and of all additions thereto, may from time to time be added to the principal in the discretion of the President and Fellows. Nothing herein shall be construed to require the expenditure of income annually.

It is the hope of the contributors, this statement of which shall not limit or restrict the discretion of the President and Fellows, that a preference will be given in the expenditure of income to the endowment of investigation and research as distinguished from lectureships and that, unless and until the fund reaches such proportions that its income is sufficient to justify the permanent appointment of an instructor or investigator the income will be accumulated for such reasonable periods as shall be necessary to make possible its expenditure in amounts adequate for important uses," from

Henry James, Jr. . . . .	\$20.00
Mrs. David P. Kimball . . . . .	3,380.50
Mrs. Richard FitzHugh Ledyard . . . . .	1,100.00
Miss Edith Perry . . . . .	10.00
Amount carried forward, . . . . .	<u>\$4,510.50</u>

Amount brought forward, . . . . .	\$4,510.50
Miss Margaret Perry . . . . .	10.00
Mr. and Mrs. Thomas Sergeant Perry . . . . .	200.00
Miss Theodate Pope . . . . .	100.00
Mrs. William G. Webb . . . . .	5,000.00
Interest . . . . .	179.50
	<hr/>
	\$10,000.00

From the estate of Mary Upham Johnson (Mrs. William Otis Johnson), \$2,000 additional, to be added to the principal of the "William Otis Johnson Scholarship" in the Medical School.

From the estate of John C. Kimball, of Greenfield, Mass., \$500, "to the Harvard Divinity School . . . the income from which is to go to any worthy poor student or students who are preparing for the Unitarian Ministry."

To be added to the George Cabot Lodge and Joseph Trumbull Stickney Memorial Book Fund, \$220, from

Louis Aubert  
F. R. Shipman  
Mrs. Austin Stickney.

From the estate of Gordon McKay, \$100,265.83 in cash, and securities valued at \$64,611.67, to be added to the Gordon McKay Endowment Fund.

From the Massachusetts Society for Promoting Agriculture, \$500 additional, to be added to the Massachusetts Society for Promoting Agriculture Fund, established in 1911 with previous gifts amounting to \$4,500, "the principal to be maintained as a part of the permanent fund of the Arnold Arboretum, the income to be applied yearly for the maintenance of said Arboretum."

From the estate of Julia M. Moseley (Mrs. William O. Moseley), of Newburyport, Mass., \$74,285.71, being her bequest of \$60,000, plus the pro rata distribution of \$50,000, to establish the "William O. Moseley Jr. Fund," "for the following purposes and upon conditions as follows viz.: — Two young men who shall have attended the Harvard Medical School connected with said College for three or four years or for the Medical course and who have given evidence of their diligence in the study of medicine and of their ability and likelihood of success shall be selected from time

to time by the President and proper officers connected with the said Medical School and to each of said two young men shall be given annually one half the income of this fund for the purpose of going to Europe; and whilst there they shall continue the study of medicine in such manner and for such time and under such rules and restrictions as said President and officers shall determine wise and best."

Towards the maintenance fund for the new building for the use of the Department of Music, from

J. Arthur Beebe . . . . .	\$1,000
Blair Fairchild . . . . .	110
Frank E. Peabody . . . . .	5,000
George Foster Peabody . . . . .	100
Norton Perkins . . . . .	500
	<hr/>
	\$6,710

From Elkan Naumburg, \$10,000, to found "The Elkan Naumburg Fellowship in Music for the use of graduates who have shown a marked ability in musical composition during their college course.

I . . . desire that the income of the fund be used to aid in the support of such graduate for a term not exceeding two years, so far as possible immediately following his graduation, while further pursuing his musical studies in this country or abroad. I wish the award to be made by a committee appointed by the Department of Music of Harvard College, who shall also fix the length of the term and direct the place where the studies are to be pursued, — the award to be made regardless of the financial ability of the candidate.

I desire that if any year there should be no candidate worthy in the judgment of the committee to receive the fellowship, the income from the sum should be added to the principal, until the fund becomes sufficient to produce an annual income of \$500 after which, in any such case, the income for that year shall be used for the library of the University, for the purchase of works, pertaining preferably to music."

From Mrs. John Knowles Paine, securities valued at \$28,000, for the establishment, after a certain specified time, of "two



fellowships, of equal value, in Music, said fellowships to be called the 'John Knowles Paine Fellowships in Music,' and to be open to undergraduates, except freshmen, and resident students of the Graduate School of Harvard University; the full annual income of which shall be paid to the holder of said Fellowships. The said student must have shown distinguished talent and originality in musical composition and high musical scholarship. The terms of said Fellowships may be for one, two, or three years, according to the recommendation of the Division of Music and the judgment of the Administrative Board of said Graduate School. . . ."

To be added to the George Herbert Palmer Fund, \$214, from

Miss Margaret V. Cobb  
James E. Gregg  
Miss Laura A. Knott  
Walter L. Leighton  
Osgood Putnam.

From the estate of Elnathan Pratt, of Worcester, Mass., \$4,775, "To the President and Fellows of Harvard College, . . . to establish a scholarship, to be known as the Elnathan Pratt Scholarship, the income of which shall be devoted annually to the support of one deserving and needy student in the undergraduate department of said college, the preference to be given to a student coming from Worcester, Massachusetts."

From Mrs. Redfield Proctor, \$25,000, "in trust, to be used towards the maintenance of the new Cancer Hospital, which the Cancer Commission of Harvard University has recently built on the grounds of the Harvard Medical School, and for the care of patients therein to its normal capacity. The principal of said sum or any part of it may be used for said purpose, or said Trustee may in its discretion keep said fund or any part of it invested and apply the income only therefrom for said purpose; provided, however, that if there should at any time be a shortage of income for the maintenance of said Hospital and the proper care of patients to its normal capacity, then and in that event such part of the principal as may be necessary therefor shall be used to supply such deficiency rather than leave empty beds or patients not properly cared for."

From the estate of Miss Mary P. Ropes, of Salem, Mass., \$2,845.71, "for the support of or to assist in endowing a Professorship to be known as the Nathaniel Ropes Chair of Political Economy. If the income . . . is more than sufficient for the support of the professorship, the Peabody Museum of Archaeology and Ethnology of which Professor F. W. Putnam is at the present time Curator, to annually receive the surplus."

From Mrs. Joshua Montgomery Sears, securities valued at \$34,000, the income to be used towards the maintenance of the Joshua Montgomery Sears, Jr. Prizes in the Law School.

From the estate of Grace R. Shaw (Mrs. Henry R. Shaw), \$35,000, in trust, to be separately invested and to be known as the "Henry Russell Shaw Fund," "the income thereof to be applied at the discretion of the President to enable one or more graduates of Harvard College upon the completion of their undergraduate studies, to pass a few months in European travel. The purpose of this gift is to make it possible for young men of promise to supplement their formal education by the broadening and cultivating influence which comes from acquaintance with other countries. While I recognize that great good is done by travelling fellowships intended to provide the means of study and research for young men who are preparing themselves for a scholar's career, I have in mind a different object, which is that of benefiting young men of worth, who without necessarily having attained to the highest scholarship in college, have made good use of their opportunities and give promise of success in professional or business careers. I therefore do not prescribe any formal tests, such as relative rank in scholarship, as the basis of awarding the income of this fund, nor do I consider it necessary that the award should be made in formal competition; for I believe that the qualities which should determine the award can be better judged through the personal acquaintance of the President and his advisers with the candidates."

For the Teachers' Endowment Fund, \$1,843.40 additional, from previous contributors.

From the estate of John Harvey Treat, of Lawrence, Mass., \$276 additional, on account of his residuary bequest, "to be called

the Treat Fund, the income whereof to be used for the benefit of the Library for the purchase of books relating to the Church of England and Churches in Communion with her, the Roman and Greek Churches, and the Episcopal Church in the United States of America, especially as regards ritual matters, . . . my desire is to make this Department of the Library as full as possible for the benefit of scholars. If the funds are more than sufficient for the purpose designated, they may be used for other departments at the direction of the Librarian. . . ."

From Mrs. Walter M. Underhill, \$10,000, to establish a fund, the income of which shall be used "for the purpose of original investigation into diseases and disturbances of function of the nervous system, especially into those nervous or mental disorders caused or affected by disorders of the body at large, or by shock, strain, physical injury, glandular disease, and the like. If at any time these investigations have become unnecessary or are sufficiently provided for, the income of the fund may be used for other objects as nearly akin thereto as possible . . ."

From the estate of Jerome Wheelock of Worcester, Mass., \$10, the ninth payment of that amount for establishing the Jerome Wheelock Fund of \$100,000.

From the estate of James Lyman Whitney, of Cambridge, Mass., \$58.32, "to form a Maria Whitney and James Lyman Whitney Fund, the income only to be expended for the benefit of the Whitney Library, established by my brother, Professor Josiah D. Whitney at the Museum of Comparative Zoölogy in Cambridge, Massachusetts."

From Charles H. Wilder, \$10,000, "to the President and Fellows of Harvard College, . . . to be added to the 'Charles Wilder Fund' to establish a chair in the Medical department of said College which is to bear the family name of 'Wilder,' . . ."

*The total amount of these gifts for capital account is \$932,409.21, as shown in Exhibit A.*

**EXHIBIT E**

**GIFTS FOR IMMEDIATE USE**

June 30, 1912

From Edwin H. Abbot, \$400, in accordance with the terms of his letter of gift, to be added to the income of the Teachers' Endowment Fund.

From the Aesculapian Club, \$150, for a scholarship in the Medical School, to be awarded during the year 1911-12.

From George R. Agassiz, \$1,000, for assistance in completing a revised Draper Catalogue for the Observatory.

From an anonymous friend, securities valued at \$5,000, for an anonymous purpose.

From an anonymous giver, \$250, for the salary of a secretary for The Cancer Commission of Harvard University.

From an anonymous giver, \$200, to secure a certain salary under The Cancer Commission of Harvard University.

From an anonymous giver, \$500, for the payment of an additional salary in the Medical School.

From an anonymous giver, \$500, to increase the Bayard Cutting Fellowship for Research in Physics for 1912-13.

From an anonymous friend, \$200, towards the cost of a book upon the history of the English Customs for the use of the Department of Economics.

From an anonymous giver, \$11,750, " For the new high-voltage electrical laboratory."

From an anonymous giver, \$1,000, the first payment on account of the offer of \$1,000 a year for five years, for the collection of material on American Government.

From anonymous donors, \$200, for a special scholarship in the Graduate School of Applied Science for 1911-12.

From an anonymous giver, \$300, for a special scholarship in the Graduate School of Arts and Sciences for 1911-12.

From an anonymous giver, \$15,000 additional, for the rebuilding and extension, as well as the furnishing, of the Library of the Gray Herbarium.

From an anonymous giver, \$250, for a special scholarship in the Medical School for 1912-13.

From an anonymous giver, \$300, "towards a salary in the Medical School."

From an anonymous giver, \$746.02 additional, towards the support of the Clinic at the Harvard Medical School.

From an anonymous donor, \$100, to be awarded in equal prizes in 1911-12 and 1912-13, to that undergraduate of Harvard or Radcliffe College who shall show, by competitive examination, the best acquaintance with the contents of the Old Testament.

To be added to the Anonymous Gift for Physical Research, from

Anonymous . . . . .	\$500
Anonymous . . . . .	15
	<hr/>
	\$515

From an anonymous giver, \$1,000, for the salary of an Assistant in Physics for 1912-13.

From an anonymous giver, \$25, for a second prize for the encouragement of the study of the Old Testament among undergraduates in Harvard and Radcliffe Colleges.

From an anonymous friend, \$1,200, for the expenses of the exchange professor to France for the year 1911-12.

From an anonymous giver, \$350, for the Ricardo Prize Scholarship for 1912-13.

From anonymous donors, \$525, for a special scholarship for 1911-12.

From an anonymous giver, \$50, to be used as the income of Scholarship Funds is used.

From an anonymous giver, \$50, for lectures in the Summer School.

From an anonymous giver, \$600, for a scholarship in the International School of American Archaeology and Ethnology at Mexico City.

To increase the income of the Arnold Arboretum for the year 1911-12, from

Gordon Abbott . . . . .	\$50	Amount brought forward . .	\$6,885
Mrs. George R. Agassis . . . .	1,000	W. Murray Crane . . . . .	100
Thomas Allen . . . . .	100	Zenas Crane . . . . .	100
Frederick L. Ames . . . . .	1,000	Mrs. Charles P. Curtis . . . .	100
John S. Ames . . . . .	200	Mrs. Charles H. Dalton . . . .	100
Miss Mary S. Ames . . . . .	1,000	Mr. and Mrs. Ernest B. Dane .	500
Oliver Ames . . . . .	100	Mrs. Arthur E. Davis . . . . .	100
Lars Anderson . . . . .	100	Frank A. Day . . . . .	100
Mrs. Lars Anderson . . . . .	100	Philip Dexter . . . . .	100
Anonymous . . . . .	300	George B. Dorr . . . . .	100
Anonymous . . . . .	200	Mr. and Mrs. Eben S. Draper .	100
Anonymous . . . . .	200	Mrs. George A. Draper . . . .	100
Anonymous . . . . .	100	Miss Hannah M. Edwards . . .	100
Mrs. S. Reed Anthony . . . . .	100	Mrs. George R. Emmerton . . .	100
Charles F. Ayer . . . . .	100	William Endicott, Jr. . . . .	100
Miss Ellen S. Bacon . . . . .	100	Mr. and Mrs. William C.	
Walter C. Baylies . . . . .	100	Endicott . . . . .	100
Boylston A. Beal . . . . .	10	Arthur F. Estabrook . . . . .	100
E. Pierson Beebe . . . . .	100	Mrs. Robert D. Evans . . . . .	200
William S. Bigelow . . . . .	100	Mr. and Mrs. Francis W.	
Charles S. Bird . . . . .	150	Fabyan . . . . .	100
George Nixon Black . . . . .	100	Charles S. Fairchild . . . . .	100
Mrs. Wilmon W. Blackmar . . .	25	Mr. and Mrs. J. Brooks Fenno .	25
Mrs. Arthur W. Blake . . . . .	100	Mrs. L. Carteret Fenno . . . .	100
Francis Blake . . . . .	100	Sewall H. Fessenden . . . . .	100
Mr. and Mrs. Edward D.		Mrs. W. Scott Fitz . . . . .	100
Brandee . . . . .	100	Mrs. J. Malcolm Forbes . . . .	50
Mrs. John L. Bremer . . . . .	100	Mrs. William H. Forbes . . . .	50
Miss Helen O. Brice . . . . .	100	Miss Cornelia A. French . . . .	100
Peter C. Brooks . . . . .	100	Mrs. Frederick Frelinghuysen .	100
Shepherd Brooks . . . . .	100	Henry C. Frick . . . . .	1,000
"E. S. C." . . . . .	100	Mrs. Henry C. Frick . . . . .	1,000
Arthur E. Childs . . . . .	50	A Friend . . . . .	200
Mrs. Arthur E. Childs . . . . .	50	Robert H. Gardiner . . . . .	50
Mrs. J. Dudley Clark . . . . .	100	George A. Gardner . . . . .	100
Alexander Cochrane . . . . .	100	Miss Sarah H. Gaston . . . . .	100
Mr. and Mrs. James M. Cod-		William A. Gaston . . . . .	250
man . . . . .	100	Mrs. William A. Gaston . . . .	100
Miss Alice S. Coffin . . . . .	100	J. E. Gay . . . . .	50
Charles A. Coffin . . . . .	150	R. H. I. Goddard . . . . .	100
Frederick G. Crane . . . . .	100	Mrs. Marie T. Green . . . . .	10
Amount carried forward . .	\$6,885	Amount carried forward . .	\$12,870

FOR THE ARNOLD ARBORETUM (*continued*)

Amount brought forward	\$12,870	Amount brought forward	\$17,645
Mrs. Henry S. Grew . . . . .	100	Thomas E. Proctor . . . . .	100
Charles Hayden . . . . .	100	William A. Read . . . . .	100
Augustus Hemenway . . . . .	200	Arthur W. Rice . . . . .	10
Mrs. Augustus Hemenway . . . . .	100	William K. Richardson . . . . .	50
Henry Hornblower . . . . .	100	William L. Richardson . . . . .	100
Mr. and Mrs. Clement S. Houghton . . . . .	100	Mrs. Jacob C. Rogers . . . . .	100
Henry S. Howe . . . . .	100	Mr. and Mrs. John L. Saltonstall . . . . .	500
Mrs. John E. Hudson . . . . .	100	Richard M. Saltonstall . . . . .	100
Henry S. Hunnewell . . . . .	100	Charles S. Sargent . . . . .	100
Mrs. Henry S. Hunnewell . . . . .	100	Mr. and Mrs. Charles S. Sargent . . . . .	250
Walter Hunnewell . . . . .	100	Charles S. Sargent, Jr. . . . .	100
Mrs. Oscar Isagi . . . . .	100	Winthrop Sargent . . . . .	100
George G. Kennedy . . . . .	100	Mrs. Winthrop Sargent . . . . .	100
Nathaniel T. Kidder . . . . .	100	Henry F. Sears . . . . .	100
Mrs. David P. Kimball . . . . .	100	Mrs. J. Montgomery Sears . . . . .	200
Mr. and Mrs. Horatio A. Lamb . . . . .	100	Mrs. Knyvet W. Sears . . . . .	100
Gardiner M. Lane . . . . .	200	Mrs. G. Howland Shaw . . . . .	100
John M. Longyear . . . . .	100	Mrs. Robert G. Shaw . . . . .	100
Arthur T. Lyman . . . . .	100	Abraham Shuman . . . . .	100
Mrs. George S. Mandell . . . . .	100	Charles D. Sias . . . . .	100
Thomas L. Manson . . . . .	100	C. R. Simpkins . . . . .	100
Miss Ellen F. Mason . . . . .	100	Frank E. Simpson . . . . .	100
Miss Fanny P. Mason . . . . .	100	Frederic E. Snow . . . . .	100
George von L. Meyer . . . . .	100	Charles A. Stone . . . . .	100
George H. Mifflin . . . . .	100	Mrs. Charles A. Stone . . . . .	100
Thomas Minns . . . . .	100	Galen L. Stone . . . . .	250
J. Pierpont Morgan . . . . .	100	Nathaniel H. Stone . . . . .	100
Mr. and Mrs. J. Pierpont Morgan, Jr. . . . .	100	Charles E. Stratton . . . . .	100
John T. Morris . . . . .	100	Charles H. Taylor . . . . .	100
Mrs. John T. Morse . . . . .	100	Mr. and Mrs. Bayard Thayer . . . . .	500
Frederick S. Moseley . . . . .	100	Eugene V. R. Thayer . . . . .	100
A. R. Nicol . . . . .	25	Mr. and Mrs. John E. Thayer . . . . .	500
Robert Osgood . . . . .	100	Washington B. Thomas . . . . .	100
John Parkinson . . . . .	100	Samuel Thorne . . . . .	50
Frank E. Peabody . . . . .	100	Robert E. Townsend . . . . .	100
George A. Peabody . . . . .	100	Theodore N. Vail . . . . .	1,000
Charles L. Peirson . . . . .	100	William A. Wadsworth . . . . .	100
Mrs. John C. Phillips . . . . .	100	Charles C. Walker . . . . .	100
Dudley L. Pickman . . . . .	100	Mr. and Mrs. William B. Walker . . . . .	100
Mrs. Dudley L. Pickman . . . . .	100	Edwin S. Webster . . . . .	100
Wallace L. Pierce . . . . .	100	Mrs. Edwin S. Webster . . . . .	100
David Pingree . . . . .	500	Frank G. Webster . . . . .	100
Mrs. Benjamin F. Pitman . . . . .	50	Mrs. Frank G. Webster . . . . .	100
Amount carried forward .	\$17,645	Amount carried forward .	\$24,255

FOR THE ARNOLD ARBORETUM (*continued*)

Amount brought forward	\$24,255	Amount brought forward.	\$25,155
Laurence J. Webster . . . . .	100	J. Reed Whipple Company . . . . .	100
Mrs. Laurence J. Webster . . . . .	100	George R. White . . . . .	1,000
Mrs. Charles G. Weld . . . . .	100	William Whitman . . . . .	100
C. Minot Weld . . . . .	100	Trustees of the Estate of	
Stephen M. Weld . . . . .	200	Edward Whitney . . . . .	100
Mrs. William G. Weld . . . . .	100	Charles W. Whittier . . . . .	100
Mrs. Henry C. Weston . . . . .	100	John D. Williams . . . . .	100
William P. Wharton . . . . .	100	Robert Winsor . . . . .	100

Amount carried forward . \$25,155

\$26,755

From James H. Veitch and Sons, \$1,453.62 additional, for the botanical exploration of Western China, begun in 1906 by Ernest Henry Wilson, on behalf of the Arnold Arboretum.

For present use at the Botanic Garden, from

Oliver Ames . . . . .	\$100
Edwin F. Atkins . . . . .	200
Ernest B. Dane . . . . .	250
Miss Caroline L. W. French . . . . .	100
	<u>\$650</u>

For present use at the Botanical Museum, from

"A friend" . . . . .	\$800
Anonymous . . . . .	1,500
Anonymous . . . . .	200
	<u>\$2,500</u>

From W. Graham Bowdoin, Jr., \$250, for the "W. Graham Bowdoin Jr. Scholarship" for 1911-12.

From Miss Abby A. Bradley, \$600 additional, to be added to the income of the William L. Bradley Fund for the Arnold Arboretum.

Towards meeting the fourth year's expenses of the Graduate School of Business Administration, in accordance with the pledges which made the undertaking possible, from

Oliver Ames . . . . .	\$500	Amount brought forward . . . . .	\$1,700
George F. Baker, Jr. . . . .	100	Allston Burr . . . . .	100
Walter C. Baylies . . . . .	500	Benjamin P. Cheney . . . . .	1,000
Charles S. Bird . . . . .	500	Charles A. Coffin . . . . .	200
Edward D. Brandegee . . . . .	100	"E" . . . . .	1,200
Amount carried forward . . . . .	<u>\$1,700</u>	Amount carried forward . . . . .	<u>\$4,200</u>



FOR GRADUATE SCHOOL OF BUSINESS ADMINISTRATION (*continued*)

Amount brought forward .	\$4,200	Amount brought forward	\$19,100
Estate of Robert D. Evans .	1,000	Nathaniel C. Nash . . . . .	100
Charles S. Fairchild . . . . .	500	Bradley W. Palmer . . . . .	100
William A. Gaston . . . . .	100	Estate of George L. Peabody	400
General Education Board . .	9,700	James H. Proctor . . . . .	100
Robert Goelet . . . . .	250	Estate of William B. Rice .	500
Robert Walton Goelet . . . .	250	Horace S. Sears . . . . .	200
Henry S. Howe . . . . .	100	Herbert N. Straus } . . . .	
A. Lawrence Lowell . . . . .	1,000	Jesse I. Straus } . . . .	500
Arthur T. Lyman . . . . .	500	Percy S. Straus } . . . .	
George S. Mandell . . . . .	500	Members of the Class of 1879	1,200
J. Pierpont Morgan, Jr. . . .	1,000		
			<hr/>
			\$22,200
Amount carried forward .	\$19,100		

For the general purposes of the Graduate School of Business Administration, from

Everett Moras . . . . .	\$25
Frederick W. Taylor . . . . .	150
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	\$175

From John R. Simpson, \$125, to be added to the Loan Fund in the Graduate School of Business Administration.

Towards the support of the Course in Printing, in the Graduate School of Business Administration, from

Thomas E. Donnelley . . . . .	\$25.00
Albert W. Finlay, for books and materials . . . . .	25.00
Charles E. Mason . . . . .	100.00
Charles Schweinler, for illustrative materials and apparatus . . . . .	50.00
The Society of Printers . . . . .	507.88
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	\$707.88

From members of "The Club of Odd Volumes," \$600, towards defraying the expenses of a course of practical instruction in Printing and Fine Book Making, given in the Graduate School of Business Administration during the year 1911-12.

From William Endicott, Jr., \$100, for the purchase of books on Transportation for the Graduate School of Business Administration.

Towards the support of the Course in Printing in the Graduate School of Business Administration during the year 1912-13, \$1,000, from

Thurber C. Adams	Benjamin Kimball
Samuel P. Avery	Gardiner M. Lane
Francis Bartlett	Joseph J. Little
The Blade Printing and Paper Company	The Meyer-Rotier Printing Company
Francis Bullard	The C. H. Morgan Company
Ogden Codman	J. Pierpont Morgan
Theodore L. De Vinne	Henry P. Porter
The Dover Press	Abraham Rothschild
William Green	Toby Rubovits
J. Eveleth Griffith	Paul J. Sachs
H. C. Hansen	Grenville Winthrop.
William B. Howland	

To be added to the "Shaw Fund for Business Research," in the Graduate School of Business Administration, from

Walter H. Cottingham . . . . .	\$100
Jonathan B. Hayward . . . . .	50
	<u>\$150</u>

From Harry Hodgson, \$75, for a prize or prizes to be awarded in the Graduate School of Business Administration during the year 1912-13.

From George O. May, \$300 additional, for prizes awarded in the Graduate School of Business Administration in 1910-11 and 1911-12.

From Carroll Dunham, \$100 additional, for present use at the Bussey Institution.

For the purchase of books for the Bussey Institution, from

Walter C. Baylies . . . . .	\$50
Carroll Dunham . . . . .	50
	<u>\$100</u>

Towards the work of The Cancer Commission of Harvard University, from

Anonymous . . . . .	\$20
Anonymous . . . . .	20
Anonymous . . . . .	5
In memory of Mrs. Curtis S. Bushnell, from Curtis C. Bushnell . . . . .	16
	<u>\$61</u>

Towards the current expenses of the Collis P. Huntington Memorial Hospital, from

George R. Agassiz . . . . .	\$500
Mrs. Arthur W. Blake . . . . .	20
Miss Georgina S. Cary . . . . .	25
Charles A. Dean . . . . .	25
Charles A. King . . . . .	50
Mrs. Alexander S. Porter, Jr. . . . .	15
William L. Richardson . . . . .	100
Wallace F. Robinson . . . . .	25
Francis Skinner . . . . .	100
Galen L. Stone . . . . .	100
John E. Thayer . . . . .	250
Henry O. Underwood . . . . .	100
Daniel G. Wing . . . . .	50
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	\$1,360

From Mrs. Collis P. Huntington, \$100,000, for the construction of the Cancer Hospital to be known as the "Collis P. Huntington Memorial Hospital."

From George R. White, \$2,500, towards furnishing the Collis P. Huntington Memorial Hospital.

From the Carnegie Foundation for the Advancement of Teaching, \$39,539.16, to pay retiring allowances granted by the Executive Committee of this Foundation to persons connected with Harvard University.

From members of the Class of 1901, \$300, for a scholarship, to be known as "The 1901 Decennial Scholarship," to be given to a first-year student during the year 1911-12.

From Gardiner M. Lane, \$1,000, for lectures in the Department of the Classics during the year 1911-12.

To be added to the income available for the payment of salaries in the College, from

Charles P. Bowditch . . . . .	\$1,000
W. Kirkpatrick Brice . . . . .	100
D. Crawford Clark . . . . .	250
Amos Tuck French . . . . .	500
Alfred W. Hoyt . . . . .	500
Gardiner M. Lane . . . . .	100
	<hr/>
	\$2,450

For additions to the permanent equipment of the Laboratory of Comparative Anatomy, \$304.76, representing the balance of the following subscriptions after the payment of bills amounting to \$195.24:

Charles P. Bowditch . . . . .	\$50
"A friend" . . . . .	100
Francis L. Higginson . . . . .	100
Harris Kennedy . . . . .	50
Amory A. Lawrence . . . . .	100
Laurence Minot . . . . .	100
	<hr/>
	\$500

From T. Jefferson Coolidge, \$50,000, for use in the construction of a chemical laboratory building, to be erected "In memory of T. Jefferson Coolidge of the Class of 1884."

From Archibald Cary Coolidge, \$10 additional, the proceeds from the sale of copies of the Hohenzollern book-plate.

From Mrs. J. Randolph Coolidge, \$36, for the purchase of a globe and a map of Boston, for the College Library.

From the Dante Society, \$100 additional, to maintain the annual prize of this amount, first offered in 1885, for the best essay on a subject drawn from the Life or Works of Dante.

From Lawrence W. Baker, \$100 additional, to forward original research in the Dental School.

From Mrs. Henry Draper, \$4,800 additional, to be spent by the Director of the Observatory in prosecuting the researches in the photography of stellar spectra with which the late Dr. Henry Draper's name is honorably associated.

From David A. Ellis, \$25, for the purchase of books on School Administration for the use of the Department of Municipal Government.

From Francis J. Swayze, \$50, for the use of the Department of Economics.

For the use of the Department of English in publishing such

contributions, either by students or instructors at Harvard, as may seem to merit preservation in permanent form, from

Laird Bell . . . . .	\$25	Amount brought forward .	\$500
William C. Boyden . . . . .	25	George D. Markham . . . . .	50
Frederic I. Carpenter . . . . .	50	Albert Matthews . . . . .	50
George G. Crocker . . . . .	50	Dudley L. Pickman . . . . .	50
Frederick P. Fish . . . . .	50	Charles A. Snow . . . . .	50
Robert Grant . . . . .	50	Francis J. Swayze . . . . .	50
Henry S. Howe . . . . .	50	Charles H. Tweed . . . . .	50
George G. Kennedy . . . . .	50	Kenneth G. T. Webster . . . . .	50
Mrs. George L. Kittredge . . . . .	100	Moses Williams . . . . .	50
William Caleb Loring . . . . .	50		
Amount carried forward . .	\$500		\$900

Towards improvements in The William Hayes Fogg Art Museum, from

Anonymous . . . . .	\$2,000
George Nixon Black . . . . .	1,000
Mrs. Edward M. Cary . . . . .	2,000
Mrs. William H. Forbes . . . . .	3,000
Alfred Atmore Pope . . . . .	5,000
	<u>\$13,000</u>

Towards the expenses of work at The William Hayes Fogg Art Museum in connection with loaning slides of Greek and Roman subjects to various high schools in Massachusetts, from

Frederick P. Fish . . . . .	\$25
Robert S. Morison . . . . .	10
James Hardy Ropes . . . . .	5
	<u>\$40</u>

From Francis Bullard, \$30, towards the purchase of a print, by Marcantonio, for The William Hayes Fogg Art Museum.

For the Division of Forestry, from

John S. Ames . . . . .	\$200	Amount brought forward .	\$1,110
Oakes Ames . . . . .	200	David N. Skillings . . . . .	100
George J. Barker . . . . .	20	Charles O. Skinner . . . . .	10
The Blanchard Lumber Com- pany . . . . .	25	Nathaniel H. Stone . . . . .	100
Warner R. Butler . . . . .	200	The Stone Lumber Company .	10
J. Randolph Coolidge . . . . .	50	John E. Thayer . . . . .	200
George B. Dorr . . . . .	100	Washington B. Thomas . . .	100
Charles Holyoke . . . . .	15	Eliot Wadsworth . . . . .	100
Amory A. Lawrence . . . . .	100	John W. Weeks . . . . .	100
Mrs. Henry S. Russell . . . . .	100	William P. Wharton . . . . .	100
Miss Marian S. Russell . . . . .	100	The John M. Woods Com- pany . . . . .	50
Amount carried forward . .	\$1,110		<u>\$1,980</u>

Towards the fund for the erection of the Harvard Freshman Dormitories, from

Horace F. Baker . . .	\$10.00	Amount brought forward	\$91,649.10
Samuel B. Booth . . .	5.00	Arthur T. Lyman . . .	5,000.00
Henry S. Bowers . . .	100.00	James E. MacCloskey, Jr.	10.00
Daniel H. Burnham . .	1,000.00	Sidney R. Miner . . .	15.00
Henry D. Bushnell . .	10.00	Kent Packard . . . .	2.00
Harrison K. Caner . .	1,600.00	George L. Paine . . . .	300.00
Frederic I. Carpenter .	100.00	Potter Palmer, Jr. . . .	1,000.00
Herbert L. Clark . . .	2,000.00	Harry D. Parkin . . .	10.00
Percy H. Clark . . . .	400.00	A. J. Drexel Paul . . .	5,000.00
Sydney P. Clark . . .	2,000.00	Howard M. Paull . . .	2.00
Frederic A. Delano . .	2,500.00	George A. Peabody . .	5,000.00
Edgar C. Felton . . .	1,000.00	Charles Elliott Perkins .	250.00
Mrs. J. Malcolm Forbes	1,000.00	David Pingree . . . .	1,500.00
Mrs. William H. Forbes	5,000.00	Evan Randolph . . . .	20.00
Harry R. Fulton . . .	7.50	Norman C. Riggs . . .	5.00
Richard Haughton . .	6.50	Mrs. Russell Sage . . .	225,000.00
Stevens Heckscher . .	100.00	Henry W. Schurr . . .	20.00
Augustus Hemenway . .	25,000.00	Mrs. Robert G. Shaw . .	500.00
Francis L. Higginson .	20,000.00	Albert L. Smith . . . .	10.00
M. Dennison Hull . . .	2,500.00	Philip L. Spalding . . .	100.00
George S. Jackson . . .	100.00	Redmond D. Stephens . .	200.00
Edward E. Jenkins . . .	120.10	Nathaniel H. Stone . . .	5,000.00
Charles F. Judson . . .	5.00	James E. Switzer . . .	50.00
Kidder, Peabody and Company . . . . .	25,000.00	Nathaniel N. Thayer . .	200.00
George C. Kimball . . .	10.00	Charlemagne Tower . . .	400.00
Charles H. Krumbhaar, Jr.	50.00	Henry O. Underwood . .	500.00
Arthur H. Lea . . . . .	1,000.00	Sidney J. Watts . . . .	1.00
Walter F. Lewis . . . .	5.00	Donald R. Wegg . . . .	50.00
Lawrence Litchfield . .	20.00	Alvin W. Wise . . . . .	25.00
Arthur Lyman . . . . .	1,000.00	Clement B. Wood . . .	40.00
		Howard Wood, Jr. . . .	20.00
Amount carried forward.	\$91,649.10		\$341,879.10

From The General Theological Seminary, \$50, to defray, in part, the expenses of Volume XXIII of "The Harvard Studies in Classical Philology."

From Archer O'Reilly, \$25, towards a new chemical laboratory, in memory of Wolcott Gibbs, LL.D., Rumford Professor and Lecturer on the Application of Science to the Useful Arts from 1863 to 1887, at this University.

From William Bennett Munro, \$108.30, towards defraying certain expenses connected with his courses in Government.

## For the Gray Herbarium, from

Rodolphe L. Agassiz . . . . .	\$10	Amount brought forward.	\$545
Miss Mary S. Ames . . . . .	10	Clement S. Houghton . . . . .	20
Anonymous . . . . .	25	Charles W. Hubbard . . . . .	10
Anonymous . . . . .	25	Mrs. John E. Hudson . . . . .	3
Edwin F. Atkins . . . . .	10	Henry S. Hunnewell . . . . .	25
Walter C. Baylies . . . . .	10	Walter Hunnewell . . . . .	10
Thomas P. Beal . . . . .	10	Edward C. Johnson . . . . .	10
Arthur C. Bent . . . . .	10	Frank L. Kennedy . . . . .	5
Mrs. Arthur W. Blake . . . . .	10	Charles A. Kidder . . . . .	10
Mrs. John L. Bremer . . . . .	10	David P. Kimball . . . . .	10
Miss Sarah F. Bremer . . . . .	10	Mrs. David P. Kimball . . . . .	10
Edward M. Brewer . . . . .	10	Miss Harriet M. Laughlin . . . . .	10
William Brewster . . . . .	10	Erasmus D. Leavitt . . . . .	10
Addison Brown . . . . .	10	George V. Leverett . . . . .	25
Mrs. William S. Bullard . . . . .	10	Mrs. George Linder . . . . .	10
Allston Burr . . . . .	10	Miss Louisa P. Loring . . . . .	10
Mrs. James B. Case . . . . .	10	Mrs. Thornton K. Lothrop . . . . .	10
Horace D. Chapin . . . . .	10	Mrs. George G. Lowell . . . . .	10
Estate of Charles F. Choate . . . . .	10	Arthur T. Lyman . . . . .	10
Miss Cora H. Clarke . . . . .	10	Mrs. Gilbert N. MacMillan . . . . .	10
Mrs. James M. Codman . . . . .	10	Miss Ellen F. Mason . . . . .	10
Miss Helen Collamore . . . . .	10	Miss Susan Minns . . . . .	50
George G. Crocker . . . . .	10	Thomas Minns . . . . .	10
Mrs. Charles A. Cummings . . . . .	10	Nathaniel C. Nash . . . . .	10
Mrs. Charles P. Curtis . . . . .	10	Grenville H. Norcross . . . . .	10
Mrs. Abram E. Cutter . . . . .	10	Mrs. Otis Norcross, Jr. . . . .	10
N. H. Daniels . . . . .	5	James L. Paine . . . . .	10
Frank A. Day . . . . .	25	Charles W. Parker . . . . .	10
Walter Deane . . . . .	15	Miss Mary R. Peabody . . . . .	10
Mrs. John W. Elliott . . . . .	10	Mrs. John C. Phillips . . . . .	10
William Endicott . . . . .	10	Mrs. Dudley L. Pickman . . . . .	10
William Endicott, Jr. . . . .	10	David Pingree . . . . .	20
"D. B. F." . . . . .	10	Laban Pratt . . . . .	5
Charles F. Fairbanks . . . . .	10	Miss Elizabeth C. Putnam . . . . .	5
Mrs. W. Scott Fits . . . . .	10	Mrs. George Putnam . . . . .	10
Francis A. Foster . . . . .	10	George E. Richards . . . . .	10
Francis C. Foster . . . . .	20	William L. Richardson . . . . .	25
Mrs. Francis C. Foster . . . . .	15	Denman W. Ross . . . . .	10
Miss Cornelia A. French . . . . .	10	Mrs. M. Denman Ross . . . . .	10
George A. Goddard . . . . .	10	Mrs. Waldo O. Ross . . . . .	10
Miss Harriet Gray . . . . .	10	Mrs. Robert S. Russell . . . . .	10
Mrs. Henry S. Grew . . . . .	10	Robert Saltonstall . . . . .	10
Mrs. Augustus Hemenway . . . . .	10	Mrs. J. Montgomery Sears . . . . .	10
Miss Clara Hemenway . . . . .	10	Mrs. Knyvet W. Sears . . . . .	10
Joseph P. B. Henshaw . . . . .	10	Mrs. G. Howland Shaw . . . . .	10
Henry Hornblower . . . . .	10	David N. Skillings . . . . .	10
Miss Katharine Horsford . . . . .	25	Francis Skinner . . . . .	10
Amount carried forward . . . . .	\$545	Amount carried forward . . . . .	\$1,088

FOR THE GRAY HERBARIUM (*continued*)

Amount brought forward . . \$1,088	Amount brought forward . . \$1,278
Francis P. Sprague . . . . . 10	Miss Cornelia Warren . . . . . 10
Isaac Sprague . . . . . 10	Benjamin M. Watson . . . . . 10
Mrs. Isaac Sprague . . . . . 20	Frank G. Webster . . . . . 20
Robert H. Stevenson . . . . . 10	Mrs. Frank G. Webster . . . . . 20
Nathaniel H. Stone . . . . . 10	Mrs. Charles T. White . . . . . 10
John E. Thayer . . . . . 100	George Wigglesworth . . . . . 10
Charles H. Tweed . . . . . 10	Miss Adelia C. Williams . . . . . 25
Charles C. Walker . . . . . 10	John D. Williams . . . . . 20
Miss Caroline E. Ward . . . . . 10	Miss Mary Woodman . . . . . 10
Amount carried forward . . \$1,278	\$1,413

From George R. White, \$31,500, to be expended in the erection of a building at the Gray Herbarium, to be known as the "George Robert White Laboratories of Systematic Botany."

From Mrs. Edwin Farnham Greene, \$100, "to be awarded during the year 1912-13 as a prize or as prizes for essays upon the subject of international arbitration in accordance with regulations to be prescribed by the Department of Government and to be known as the Lake Mohonk Prize and to be open for competition to undergraduates of Harvard University."

From the Harvard Club of Boston, \$1,000, for five scholarships of \$200 each, to be awarded during the year 1912-13, "to properly qualified graduates of public High and Latin Schools (including the Roxbury Latin School), within a radius of twenty miles from the State House in Boston, during their first year in Harvard College as candidates for the degree of A.B. or S.B."

From the Harvard Club of Buffalo, \$400, for the scholarship of the Club for 1910-11 and 1911-12.

From the Harvard Club of Cleveland, \$650, for the scholarship of the Club for 1910-11 and 1911-12.

From the Harvard Club of the Connecticut Valley, \$200, for the scholarship of the Club for 1911-12.

From the Harvard Club of Fitchburg, \$150, for the scholarship of the Club for 1911-12.

From the Harvard Club of Hawaii, \$200, for the scholarship of the Club for 1911-12.



From the Harvard Club of Hingham, \$100, for the scholarship of the Club for 1911-12.

From the Harvard Club of Kansas City, Missouri, \$150, for the scholarship of the Club for 1912-13, to "be awarded to an applicant who is a resident of Jackson County, Mo. or Wyandotte County, Ks., if such a person applies; otherwise . . . to an applicant who is a resident of the state of Missouri or of the state of Kansas; and that it be awarded to an applicant as above for use while he is a member of the Freshman Class in Harvard College."

From the Harvard Club of Louisiana, \$257.14, for the scholarship of the Club for 1911-12.

From the Harvard Club of Lowell, \$350, for two scholarships for the year 1911-12, the beneficiaries to be nominated by a committee of the Club.

From the Harvard Club of Lynn, \$100, for the scholarship of the Club for 1911-12.

From the Harvard Club of Maine, \$150, for the scholarship of the Club for 1911-12.

From the Harvard Club of Nebraska, \$150, for the scholarship of the Club for 1911-12.

From the Harvard Club of New Jersey, \$250, the fourth annual prize of this amount to be awarded to that student from New Jersey who enters the Freshman Class in Harvard College with the highest credit in his examinations for admission.

From the Harvard Club of Western Pennsylvania, \$600, to maintain three scholarships during the year 1911-12.

From the Harvard Club of Rhode Island, \$150, for the scholarship of the Club for 1911-12.

From the Harvard Club of Rochester, N. Y., \$200, for the scholarship of the Club for 1912-13.

From the Harvard Club of San Francisco, \$500, for the scholarship of the Club for 1911-12.

From the Harvard Club of Seattle, \$200, for the scholarship of the Club for 1911-12.

From the Harvard Club of St. Louis, \$300, for the scholarship of the Club for 1911-12.

From the Harvard Club of St. Louis, \$140.10, for a special scholarship of the Club for 1911-12.

From the Harvard Club of Syracuse, \$200, for the scholarship of the Club for 1911-12.

From the Harvard Club of Worcester, Mass., \$100, for the scholarship of the Club for 1911-12.

From the Harvard Medical Alumni Association, \$2,000 additional, to be used to increase the salaries of some of the younger Instructors and Assistants in the Medical School.

Towards refitting Holworthy Hall, from

Richard H. Dana . . . . .	\$100
William Farnsworth . . . . .	50
	<u>\$150</u>

From anonymous friends of the University, \$200, the third annual scholarship of this amount, to maintain the Huidekoper Scholarship, established in 1909-10, in memory of Edgar Huidekoper and Frances Shippen Huidekoper of Meadville, Pa., "to be enjoyed by a properly qualified graduate of Allegheny College, Meadville, Pennsylvania, who may desire to pursue his studies in one of the graduate departments of the University. The incumbent of the scholarship is to be chosen in the usual manner after conference with the proper authorities at Allegheny College. This scholarship may be held in two or three successive years by the same student if there be no other candidates."

From James H. Hyde, \$600, for the Fellowship at the Ecole des Sciences Politiques, for the year 1911-12.

Towards the investigation of Infantile Paralysis, conducted by and under the direction of Dr. Theobald Smith, from

Thomas F. Baxter . . . . .	\$100
William A. L. Bazeley . . . . .	100
Edmund D. Codman . . . . .	100
Amount carried forward . . . . .	<u>\$300</u>

TOWARDS INVESTIGATION OF INFANTILE PARALYSIS (*continued*)

Amount brought forward . . . . .	\$300
Edmund W. Converse . . . . .	200
Stephen V. R. Crosby . . . . .	100
Frederick L. Dabney . . . . .	100
Sewall H. Fessenden . . . . .	100
Eben D. Jordan . . . . .	200
David P. Kimball . . . . .	100
Neal Rantoul . . . . .	100
George T. Rice . . . . .	200
Richard C. Storey . . . . .	100
Edwin S. Webster . . . . .	250
George Wigglesworth . . . . .	100
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	\$1,850

From Gardiner M. Lane, \$150, for an additional University Scholarship for 1912-13 in the Graduate School of Arts and Sciences.

From Deen Lombard Robinson, \$450, repayment of scholarships received by him while in the Law School.

From Joseph Lee, \$250, towards the support of the course in School Music at the Summer School of 1911.

From Joseph Lee, \$5,000, for the salary of an instructor in the Department of Education for 1910-11 and 1911-12.

For the purchase of books for the College Library, from

Anonymous . . . . .	\$10.95
Esra H. Baker, } for a collection of the writings of Daniel Defoe {	20.00
Grenville H. Norcross, }	25.00
Thomas Barbour, for books on Oceania . . . . .	5.00
Mrs. Louis Bettman, for books, as a permanent memorial of the quindecennial celebration of the Class of 1897, of which her son, Dr. Milton Bettman, was a member . . . . .	100.00
Lawrence S. Butler, for books on Paris . . . . .	50.00
William R. Castle, Jr., } for additions to the collection of the works {	90.00
John L. Saltonstall, } of Alexander Pope . . . . .	50.00
Alexander Cochrane . . . . .	1,000.00
Archibald Cary Coolidge, for books on French History, German History, and other subjects . . . . .	5,500.00
Harold J. Coolidge, for books on China . . . . .	50.00
J. Randolph Coolidge, for a set of the Bradley Bibliography, published by the Arnold Arboretum . . . . .	100.00
John Craig, for books on the history of the English Drama . . . .	250.00
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Amount carried forward . . . . .	\$7,250.95

FOR THE PURCHASE OF BOOKS FOR THE COLLEGE LIBRARY (*continued*)

Amount brought forward . . . . .	\$7,250.95
The Lady Sybil Cutting, for books on the history of Florence and other cities of Northern Italy, to be added to the William Bayard Cutting, Jr. Collection . . . . .	100.00
Ernest B. Dane, } John H. Sedgwick, } for books on English Literature . . . . . Francis Skinner, } Lucius Wilmerding, }	{ 1,000.00 10.00 200.00 50.00
Dante Society . . . . .	50.00
James Lloyd Derby, for books on the Philippine Islands . . . . .	50.00
Ellis L. Dresel, for books on German Drama . . . . .	50.00
Tracy Dows . . . . .	100.00
William Endicott, Jr., for works in history . . . . .	1,500.00
Department of English, for English Poetry . . . . .	359.95
Edward N. Fenno, Jr. . . . .	100.00
Robert F. Foerster . . . . .	6.85
John Hays Gardiner, for books on Burmah . . . . .	10.00
Ernest L. Gay, for ballad-operas . . . . .	8.00
Franklin Mott Gunther, for books on Central America . . . . .	10.00
Charles Jackson, for books on English History and English Literature . . . . .	2,000.00
George L. Kittredge, for books illustrating the history of Witchcraft . . . . .	60.00
John S. Lawrence, for books on the lives of successful men . . . . .	10.00
Marshall C. Lefferts, for an edition of the letters of Alexander Pope . . . . .	9.20
James Loeb, for "Labor Periodicals" . . . . .	100.00
Percival Hall Lombard . . . . .	25.00
Ogden L. Mills . . . . .	75.00
Edwin Stanton Mullins, for books on Folk-lore . . . . .	50.00
Walter W. Naumburg, for books on Shakespere . . . . .	100.00
William Phillips, for books on London . . . . .	100.00
Saturday Club of Boston, Mass. . . . .	300.00
Horace B. Stanton, for the Molière Collection . . . . .	25.00
Frank Graham Thomson . . . . .	100.00
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	\$13,809.95

Towards defraying the expenses of architectural studies in connection with enlarging Gore Hall, from

Francis R. Appleton . . . . .	\$200
Edward D. Brandegee . . . . .	200
William A. Gaston . . . . .	200
Henry S. Howe . . . . .	200
Gardiner M. Lane . . . . .	200
Francis Shaw . . . . .	200
Interest . . . . .	50
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	\$1,250

From J. Pierpont Morgan, Jr., \$1,000, towards providing additional service at the College Library.

From friends, in memory of Henry Weidemann Locke, S.B. 1902, \$100 additional, for a scholarship for 1911-12 in Electrical Engineering in the Graduate School of Applied Science.

To maintain The MacDowell Fellowship in Dramatic Composition, established in 1910-11, which may be held by a student of Harvard or Radcliffe College selected, after open competition, by Professor George P. Baker of the Department of English and accepted as holder of the Fellowship by The MacDowell Club of New York, from

George P. Baker . . . . .	\$25
The MacDowell Club of New York . . . . .	550
	<u>\$575</u>

From Philippe Belknap Marcou, \$50 additional, for a prize for French Composition, to be called the Jeremy Belknap Prize, as a memorial to Dr. Jeremy Belknap of the Class of 1762.

From the Massachusetts Society for Promoting Agriculture, \$2,000 additional, "to be expended at the Arnold Arboretum by the Director, to increase the knowledge of trees."

From the Massachusetts Society for Promoting Agriculture, \$1,200 additional, "to aid the College to enable Professor Theobald Smith to continue his experiments on bovine tuberculosis . . . ."

From J. Ewing Mears, \$225, his third annual gift in accordance with the terms of his offer to establish a scholarship with an income of \$225 a year, to be designated "The James Ewing Mears, M.D. Scholarship in Medicine," to be held by the beneficiary "for the full course of four years in the Medical School, subject to the standing he shall maintain in scholarship and to his good conduct as a student."

For a Zeiss microscope, Minot rotary microtome, and other laboratory supplies for the Medical School, \$267.42 additional from

Richard Sisson Austin	Oliver Street Hillman
Alexander Manlius Burgess	Frank Burr Mallory
Russell Richardson.	

From Walter P. Bowers, \$50, to be added to "The Loan Fund of the Medical Class of 1879."

From George G. Sears, \$20, towards the construction, at the Medical School, of tennis courts, squash courts, etc. for students' exercise.

To be added to the income available for the payment of salaries in the Medical School, from

Charles S. Minot . . . . .	\$200
William H. Walker . . . . .	1,000
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	\$1,200

For the use of the Division of Music, from

Frederick S. Converse . . . . .	\$30
Arthur W. Foote . . . . .	30
James Loeb . . . . .	100
Dave H. Morris . . . . .	100
Horace E. Smith . . . . .	75
Philip L. Spalding . . . . .	50
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	\$385

From Miss Katherine E. Bullard, \$500 additional, for the benefit and use of the Department of Neuropathology in the Medical School.

From James J. Putnam and Moorfield Storey, Trustees of the fund created by Arthur W. Blake, \$600 additional, for the Department of Neuropathology, for researches bearing on the knowledge and treatment of diseases of the nervous system.

From Grafton D. Cushing, \$25, to be added to the income of the Boston Newsboys' Scholarship Fund, for 1911-12.

For the purchase of a freezing microtome, travelling microscope, slide boxes, typewriter, and other apparatus, for the Department of Pathology in the Medical School, \$290.40, from

Richard Sisson Austin  
Alexander Manlius Burgess  
Frank Burr Mallory.

From the Patria Society of Harvard University, \$50, to be awarded by the Corporation of Harvard College, during the year

1911-12, to the winner of a prize essay contest, open only to undergraduates, upon the subject, "Harvard Men in the Revolution."

For the Peabody Museum of American Archaeology and Ethnology, from

Mrs. N. E. Baylies . . . . .	\$25.00
J. A. Lowell Blake . . . . .	249.99
Clarence B. Moore . . . . .	500.00
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	\$774.99

For the Peabody Museum of American Archaeology and Ethnology, towards explorations in the Delaware Valley, from

"A Friend" . . . . .	\$75
Le Duc de Loubat . . . . .	400
Charles Peabody . . . . .	450
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	\$925

From Henry W. Haynes, \$50, his fourth annual gift to the Peabody Museum of American Archaeology and Ethnology, for the general purposes of the Library, including binding current serials.

From Charles Peabody, \$25, for the payment of transportation charges on European Collections for the Peabody Museum of American Archaeology and Ethnology.

From Miss Mary L. Ware, \$540, towards the salary of an Assistant in the Peabody Museum of American Archaeology and Ethnology.

From Mrs. William Hooper, \$1,000 additional, on account of her offer of one thousand dollars a year, in memory of her father, Charles Elliott Perkins, for the purchase of books and material bearing on the history and development of that part of America which lies beyond the Alleghanies.

From Edward Dyer Peters, \$250, his fifth gift of like amount, for a scholarship in Mining and Metallurgy in the Graduate School of Applied Science for the year 1912-13.

From John C. Phillips, \$3,000 additional, to be used under the direction of the Shattuck Professor of Pathological Anatomy,

the Associate Professor of Pathological Anatomy, and the donor, for work in the Department of Pathology.

From John C. Phillips, \$700, towards the salary of an Assistant at the Bussey Institution for 1911-12.

From Reginald C. Robbins, \$60, towards meeting the deficit in the Library of Philosophy in Emerson Hall incurred during the year 1910-11.

From Reginald C. Robbins, \$200, for the use of the Library of Philosophy in Emerson Hall during the year 1911-12.

From Theodore Lyman, \$200, for the salary of an Assistant in Physics for 1911-12.

From Edward C. Pickering, \$3,000 additional, for immediate use at the Observatory.

For the Department of Political Economy, from

" A Friend " . . . . .	\$200
Gordon Abbott . . . . .	100
Thomas P. Beal . . . . .	200
Benjamin P. Cheney . . . . .	200
T. Jefferson Coolidge, Jr. . . . .	100
William Endicott, Jr. . . . .	200
Thomas W. Lamont. . . . .	100
George B. Leighton . . . . .	100
Robert Treat Paine . . . . .	100
Arthur Perry . . . . .	100
Eliot Wadsworth . . . . .	100
George Wigglesworth . . . . .	200
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	\$1,700

From Murray Anthony Potter, \$125, towards the support of a course in Spanish Composition during the year 1911-12.

From Murray Anthony Potter, \$225, in memory of his mother, for two prizes in Comparative Literature, to be called the " Susan Anthony Potter Prizes," and for a prize in Spanish Literature of the Golden Age.

From Andrew W. Preston, \$2,000 additional, for the salary of a lecturer on South American Economics, Resources and Commerce.

From Frederick Madison Allen, \$393.75 additional, for the Department of Preventive Medicine and Hygiene.



From Evan Randolph, \$100, to Harvard University, without restriction.

From Francis Bullard, \$20, to be added to the Mary R. Searle Fund.

From Mrs. Joshua Montgomery Sears, \$650 additional, to be added to the income of the Joshua Montgomery Sears, Jr. Prize Fund, to be distributed, during the year 1911-12 in not exceeding four prizes, to students in one or more or all of the classes in the Harvard Law School.

From Clift Rogers Clapp, \$10, to be added to Scholarship and Beneficiary Money Returned.

From Henry L. Shattuck, \$50 additional, towards the general expenses of undergraduate instruction in Harvard College.

From Arch Wilkinson Shaw, \$1,200, to be used for research work in connection with the Graduate School of Business Administration, the gift to be known as the "Shaw Fund for Business Research."

From Francis Skinner, \$2,000 additional, for the purchase of books for the Arnold Arboretum in memory of his father, Francis Skinner, of the Class of 1862.

From Mr. and Mrs. Frederick Nichols, \$500 additional, for the School for Social Workers.

From the Society for Promoting Theological Education, \$1,091.11, "for the purchase of books for the library of the Harvard Divinity School and for the administration of said Library."

For the South End House Fellowship for 1911-12, from

Archibald Cary Coolidge . . . . .	\$10
Randolph C. Grew . . . . .	200
Augustus Hemenway, Jr. . . . .	25
Robert Homans . . . . .	3
Francis Welles Hunnewell, 2d . . . . .	15
F. Lowell Kennedy . . . . .	5
Frederick Law Olmsted . . . . .	5
Charles Weil . . . . .	5
Alexander Whiteside . . . . .	10

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\$278

For the South End House Fellowship in Social Education for the year 1911-12, from

South End House Association . . . . .	\$150
Trustees of the estate of Caroline A. R. Whitney . . . . .	200
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	\$350

From Joseph E. Sterrett, \$100 additional, for the purchase of books relating to accounting, for the Graduate School of Business Administration.

From John B. Stetson, Jr., \$100 additional, for books and periodicals for the Library of the Peabody Museum of American Archaeology and Ethnology.

To forward original work in the Laboratory of Surgical Research, from

Anonymous . . . . .	\$20
John S. Ames . . . . .	1,000
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	\$1,020

For the purchase of books for the Surgical Library, from

William Sturgis Bigelow . . . . .	\$100
Mrs. F. Gordon Dexter . . . . .	50
Augustus Hemenway . . . . .	100
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	\$250

From Francis J. Swayze, \$75, "for such purpose as Professor Taussig approves."

From John E. Thayer, \$500 additional, for the Bermuda Biological Station for Research.

From Frank Graham Thomson, \$5,000 additional, for additional instruction in Municipal Government.

Towards the support of the Bureau of Municipal Research in connection with the course in Municipal Government, from

Clarke Thomson . . . . .	\$1,250
Frank Graham Thomson . . . . .	1,250
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	\$2,500

From Mrs. Walter M. Underhill, \$500, for researches in Neurology under the direction of Professor E. E. Southard.

For the purchase of incunabula to be added to the Weld Memorial Library, from

Edward D. Brandege . . . . .	\$750
Mrs. Edward D. Brandege . . . . .	500
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	\$1,250

From Alfred T. White, \$2,500 additional, for immediate use, "to be expended under the direction of the Department of Social Ethics."

From George Wigglesworth, \$295, towards defraying the expenses of the Choir in Appleton Chapel during the year 1910-11.

From George Wigglesworth, \$70, to defray the expenses of the Choir in Appleton Chapel during the session of the Summer School of 1911.

From Mrs. William Barbour, \$1,785.50, to be used for the illustrations of a forthcoming Memoir of the Museum of Comparative Zoölogy.

*The total amount of these gifts for immediate use is \$771,772.20, as shown in Exhibit B.*

SCHEDULE 1

**SPECIAL INVESTMENTS**

June 30, 1912

UNIVERSITY		Principal.	Net Income.
<b>Walter F. Baker,</b>			
Real Estate in Boston (sold during the year), . . . . .		.....	.....
4 shares New York, New Haven & Hartford R.R., . . . . .		\$560.00	\$34.00
5 " Boston & Maine R.R., . . . . .		500.00	15.00
6 " West End Street R.R., . . . . .		522.00	10.50
2 " " " " " preferred, . . . . .		206.00	4.00
4 " Am. Tel. & Tel. Co., . . . . .		552.00	16.00
2 " Municipal Real Estate Trust, . . . . .		204.00	4.00
1 " Belvidere Woolen Manufacturing Co., . . . . .		100.00	.....
<b>John W. Carter,</b>			
University Houses and Lands, . . . . .		12,500.00	228.31
<b>George B. Dorr,</b>			
University Houses and Lands, . . . . .		115,966.56	2,071.70
<b>George Draper,</b>			
University Houses and Lands, . . . . .		48,458.50	865.69
<b>Robert H. Eddy,</b>			
University Houses and Lands, . . . . .		56,787.00	1,014.51
<b>John Davis Williams French,</b>			
University Houses and Lands, . . . . .		5,322.09	95.27
<b>John C. Gray,</b>			
University Houses and Lands, . . . . .		25,000.00	446.63
<b>Walter Hastings,</b>			
Real Estate, Sacramento St., Cambridge, . . . . .		20,000.00	1,197.72
<b>Henry L. Higginson,</b>			
University Houses and Lands, . . . . .		81,435.45	1,454.80
<b>Insurance and Guaranty,</b>			
Real Estate, Lucas St., Boston, . . . . .		4,000.00	.....
<b>Joseph Lee,</b>			
University Houses and Lands, . . . . .		10,000.00	178.65
<b>Henry S. Nourse (part),</b>			
Mortgage on Real Estate in Chicago, Ill. . . . .		.....	110.00
<b>Francis E. Parker,</b>			
University Houses and Lands, . . . . .		113,817.44	2,038.83
<b>Henry L. Pierce (Residuary) (part),</b>			
Equipment at Memorial Hall, . . . . .		157,098.14	7,069.42
Amounts carried forward, . . . . .		\$653,029.18	\$16,834.53

	Principal.	Net Income.
Amounts brought forward, . . . . .	\$653,029.18	\$16,834.53
<b>Riverside,</b>		
11 shares Harvard Riverside Associates, . . . . .	11,000.00	.....
<b>Henry Villard,</b>		
University Houses and Lands, . . . . .	50,000.00	893.24
<b>William F. Weld,</b>		
University Houses and Lands, . . . . .	100,000.00	1,786.47
<b>COLLEGE</b>		
<b>Daniel A. Buckley (part),</b>		
Real Estate in Cambridge, Mass., . . . . .	66,345.59	7,045.08
" " Deer Isle, Me., . . . . .	1.00	.....
<b>George Newhall Clark,</b>		
100 shares St. Joseph R'y, Light, Heat & Power Co. pref'd, . . . . .	10,000.00	500.00
<b>Edward W. Codman (part),</b>		
2 shares Pacific Mills, . . . . .	4,600.00	160.00
15 " Barristers Hall Trust, . . . . .	1,085.00	60.00
12 " Boston Real Estate Trust, . . . . .	14,841.50	517.50
<b>Edward Erwin Coolidge,</b>		
200 shares U. S. Smelting, Ref. & Mining Co. pref'd,	9,000.00	700.00
<b>T. Jefferson Coolidge, for Research in Physics,</b>		
648 shares Massachusetts Electric Cos., cum. pref'd,	59,805.25	2,500.00
<b>Eliot Professorship (Jonathan Phillips's Gift),</b>		
\$10,000 City of Boston 3½'s of 1920, . . . . .	10,000.00	350.00
<b>Professorship of Hygiene (part),</b>		
Policy of Mass. Hospital Life Insurance Co., . .	5,000.00	206.25
35 shares American Smelting & Refining Co., . .	3,112.22	285.83
60 " American Tel. & Tel. Co., . . . . .	6,250.00	420.00
40 " Chicago, Milwaukee & St. Paul, . . . .	4,000.00	240.00
<b>Charles Eliot Norton Fellowship,</b>		
\$15,000 Northern Pacific-Great Northern Joint 4's (C. B. & Q. collateral) of 1921, . . . . .	14,100.00	600.00
5,000 Louisville & Nashville Unified M. 4's of 1940,	5,000.00	200.00
<b>George Foster Peabody Scholarship,</b>		
\$6,000 Mexican Coal & Coke Co. 1st M., S. F. 5's of 1926, . . . . .	4,800.00	.....
<b>John K. Paine Music Fellowship,</b>		
Mortgage Notes, . . . . .	28,000.00	371.25
<b>Sarah E. Potter Endowment (part),</b>		
100 shares Boston & Albany (sold during the year),	.....	250.00
100 " Massachusetts Electric Cos., cum. pref'd (sold during the year), . . . . .	.....	200.00
60 " Plymouth Cordage Co., . . . . .	11,000.00	420.00
12 " Pureoxia Co., . . . . .	60.00	5.40
Amounts carried forward, . . . . .	\$1,070,529.74	\$24,545.55

	Principal	Net Income.
Amounts brought forward, . . . . .	\$1,070,529.74	\$34,545.55
<b>William Reed Scholarship,</b>		
\$1,000 New York Central & H. R. Gold 3½'s of 1897, . . . . .	1,000.00	35.00
1,000 Norfolk and Western Divisional 1st lien & gen. M. 4's of 1944, . . . . .	1,000.00	40.00
2,000 Northern Pacific-Great Northern Joint 4's (C. B. & Q. collateral) of 1921, . . . . .	2,000.00	80.00
<b>Nelson Robinson Jr. Additional (part),</b>		
1,750 shares Gauley Coal Land Co. preferred, . . . . .	175,000.00	.....
<b>Eliza O. and Mary P. Ropes (part),</b>		
100 shares Chicago, Milwaukee & St. Paul, . . . . .	13,087.50	600.00
100 " Northern Pacific, . . . . .	11,986.50	700.00
220 " Pennsylvania, . . . . .	12,987.50	645.00
<b>Dunlap Smith Scholarship,</b>		
\$5,000 Metropolitan West Side Elevated R. R. Extension M. 4's of 1888, . . . . .	4,700.00	200.00
<b>Stoughton Scholarship (part),</b>		
Real Estate in Dorchester, . . . . .	3,294.30	70.48
<b>Teachers' Endowment (part),</b>		
\$5,000 Broadway Realty Co. Purchase Money, 2d M. 5's of 1916, . . . . .	5,000.00	250.00
50,000 Wisconsin Central, Minneapolis Terminal Purchase Money M. 3½'s of 1950, . . . . .	50,000.00	1,750.00
10 shares Harvard Riverside Associates, . . . . .	10,000.00	.....
<b>Wales Professorship of Sanskrit,</b>		
Real Estate, Cornhill, Boston (sold during the year), . . . . .	.....	1,290.71
<b>Samuel Ward's Gift (part),</b>		
Ward's (Bumkin) Island, Boston Harbor, . . . . .	1.00	.....
<b>J. Palmer Welsh Memorial (part),</b>		
\$1,000 Ontario Power Co. 5's of 1948, . . . . .	1,000.00	50.00
<b>LIBRARY</b>		
<b>William R. Castle,</b>		
\$1,000 Honolulu Gas Co., Limited, 6's of 1925, . . . . .	1,000.00	60.00
<b>Francis Parkman Memorial (part),</b>		
\$5,000 Louisville & Jeffersonville Bridge 1st M. Gold 4's of 1945, . . . . .	4,500.00	200.00
<b>Ishabod Tucker (part),</b>		
Policy of Mass. Hospital Life Insurance Co., . . . . .	5,000.00	206.25
<b>John Harvey Treat (part),</b>		
130 Shares Treat Hardware Supply Co., . . . . .	6,500.00	390.00
75 " United Shoe Machinery Co., . . . . .	4,050.00	150.00
Deposit in Lawrence Savings Bank (withdrawn), . . . . .	.....	32.88
Amounts carried forward, . . . . .	\$1,382,636.54	\$41,295.87

	Principal.	Net Income.
Amounts brought forward, . . . . .	\$1,382,686.54	\$41,295.87

## LAW SCHOOL

<b>Joshua M. Sears Memorial,</b>		
\$14,000 Illinois Steel Co. Deb. 5's of 1913, . . .	14,000.00	350.00
10,000 Minneapolis General Electric, Gold M. 5's of 1934, . . . . .	10,000.00	.....
10,000 New England R.R. Consol. M. 5's of 1945, . . . . .	10,000.00	.....

## MEDICAL SCHOOL

<b>John C. Cutter Bequest,</b>		
\$8,000 Carthage Water Power Co., 1st M. 5 % Notes, Deposit in Leicester Savings Bank (withdrawn during the year), . . . . .	1.00 .....	..... 10.00
<b>Calvin and Lucy Ellis (part),</b>		
\$40,000 Northern Pacific-Great Northern Joint 4's (C. B. & Q. collateral) of 1921, . . . . .	26,585.00	1,600.00
Real Estate in Boston (half interest in), (sold during the year), . . . . .	.....	102.67
Real Estate in Eden, Bar Harbor, Maine, . . . . .	10,000.00	.....
<b>Hamilton Kuhn Memorial (part),</b>		
\$14,000 Burl. & Mo. in Nebr. non-ex. 6's of 1918, .	14,570.00	840.00
20,000 Kansas C., Mem. & Birm. Inc. 5's of 1934, .	17,600.00	1,000.00
10,000 U. Elec. Sec. Coll. Tr. 5's of 1937, 26th ser., 189 shares Edison Elec. Ill'm'ng Co. of Boston (sold during the year), . . . . .	10,000.00 .....	500.00 1,134.00
<b>Robert Charles Billings (part),</b>		
Real Estate, Wigglesworth St. & Power House, Vila St., Boston, . . . . .	68,267.67	.....
<b>George C. Shattuck (part),</b>		
\$25,000 Kansas City, Fort Scott & Memphis R. R. Cons. M. 6's of 1928 (\$203.70 deducted from in- come for sinking premium), . . . . .	28,259.30	1,296.30
<b>Henry P. Walcott Fellowship in Clinical Medi- cine (part),</b>		
\$8,000 J. M. Guffey Petroleum Co. 1st M. 5's of 1912 (paid during the year), . . . . .	.....	300.00
5,000 J. M. Guffey Petroleum Co. 1st M. 5's of 1913, .	5,000.00	250.00
2,000 " " " 1914, . . . . .	2,000.00	100.00

## MUSEUM OF COMPARATIVE ZOOLOGY

<b>Maria Whitney,</b>		
\$3,000 City of Providence 4's of 1911 (paid during the year), . . . . .	.....	40.00
<b>Alex. Agassiz Bequest, Clause XI,</b>		
Real Estate in Cambridge, . . . . .	50,000.00	.....
Amounts carried forward, . . . . .	\$1,648,919.51	\$48,818.84

	Principal.	Net Income.
Amounts brought forward, . . . . .	\$1,648,919.51	\$48,818.84

## OBSERVATORY

<b>Advancement of Astronomical Science (1902),</b>		
15 shares Calumet & Hecla Mining Co., . . . . .	9,000.00	450.00

PEABODY MUSEUM OF AMERICAN ARCHAEOLOGY  
AND ETHNOLOGY

<b>Peabody Building (part),</b>	} \$54,000 Kansas & Missouri R. R. 1st M. 5's of 1922,	{	11,512.72	622.32
<b>Peabody Collection (part),</b>			19,218.64	1,088.84
<b>Peabody Professor (part),</b>			19,218.64	1,088.84

<b>Thaw (part) (\$8.47 deducted from income for sinking premium),</b>		
\$20,000 Girard Point Storage Co. 1st M. 3½'s of 1940,	20,237.31	691.53

## ARNOLD ARBORETUM

<b>Robert Charles Billings,</b>		
\$5,000 Butte Water Co. 1st M. 5's of 1921, . . . . .	4,000.00	250.00

## BUSSEY INSTITUTION

<b>Woodland Hill,</b>		
Laboratory of Comparative Pathology building, . .	20,658.86	1,000.00

## SPECIAL FUNDS

<b>Anonymous (1912),</b>		
\$5,000 Newton Street Railway 1st M. 5's of 1912, .	5,000.00	.....

<b>Bussey Trust (part),</b>		
Real Estate in Boston, . . . . .	381,972.12	30,133.14

<b>Fund of the Class of 1834,</b>		
Policy of Mass. Hospital Life Insurance Co., . . .	1,000.00	41.25

<b>Fund of the Class of 1844,</b>		
Policy of Mass. Hospital Life Insurance Co., . . .	6,500.00	268.13

<b>Fund of the Class of 1853,</b>		
Policy of Mass. Hospital Life Insurance Co., . . .	3,725.00	153.66

<b>Calvin and Lucy Ellis Aid (part),</b>		
Real Estate in Boston (half interest in), (sold during the year), . . . . .	.....	102.68
11 shares Massachusetts Cremation Society, . . .	1.00	5.50

<b>Charles L. Hancock Bequest (part),</b>		
Real Estate in Chelsea and Chicago, . . . . .	65,001.00	4,765.95

<b>Freshman Dormitories,</b>		
\$20,000 Mahoning & Shenango R'y & Light, 1st Consol. Ref. M. 5's of 1916, . . . . .	20,000.00	.....

Amounts carried forward, . . . . .	\$2,235,964.80	\$89,380.68
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		Principal.	Net Income.
Amounts brought forward, . . . . .		\$2,235,964.80	\$39,380.68
Anonymous,			
\$20,000	Massachusetts 8's of 1930, . . . . .	20,000.00	600.00
5,000	" " 1939, . . . . .	5,000.00	150.00
19,000	" " 1941, . . . . .	19,000.00	570.00
4,000	" 3½'s 1915 (sold during year), . . . . .		95.28
6,000	" " 1916, " " " . . . . .		142.92
6,000	" " 1917, " " " . . . . .		142.92
2,000	" 3's 1918, " " " . . . . .		47.64
5,000	" " 1920, " " " . . . . .		104.52
10,000	" " 1923, " " " . . . . .		175.00
5,000	" " 1935, " " " . . . . .		148.26
12,000	" " 1940, " " " . . . . .		280.00
189 shares	Edison Electric Ill'm'ng Co. of Boston, . . . . .	55,188.00	1,134.00
Robert Troup Paine (accumulating) (\$127.07 deducted from income for sinking premiums),			
\$38,000	Massachusetts 3½'s of 1913 (sold during year), . . . . .		1,275.11
5,000	" " 1916, . . . . .	5,083.44	154.15
29,000	" " 1935, . . . . .	28,258.80	843.85
31,000	" " 1938, . . . . .	29,623.14	25.98
2,000	" " 1936, . . . . .	1,885.00	.....
George Smith Bequest (part),			
\$10,000	Duquoin, Ill., Water Works Co. 6's of 1901, . . . . .	1.00	.....
20,000	Laclede Gas Light Co. 5's of 1919, . . . . .	20,000.00	1,000.00
200 shares	Laclede Gas Light Co., preferred, . . . . .	18,800.00	1,140.00
20	" " " " common, . . . . .		
Frederick Sheldon (part),			
\$2,000	New York Gas & Electric Light, Heat & Power Co. 4's of 1949 (sold during year), . . . . .		98.67
2,000	Twenty-eighth and Twenty-ninth Street Crosstown Ry. 1st M. 5's of 1996, . . . . .	500.00	.....
20 shares	Astor Trust Co. (sold during year), . . . . .		120.00
23	" Bank of America, " " " . . . . .		621.00
82	" Consolidated Gas Co. of New York (sold during the year), . . . . .		369.00
11	" Corn Exchange Bank (sold during the year), . . . . .		132.00
100	" Manhattan Trust Co. (sold during the year), . . . . .		540.00
23	" Mexican Telegraph Co., . . . . .	4,370.00	230.00
50	" New York Loan & Improvement Co., (sold during the year), . . . . .		175.00
7	" Newport Trust Co. (sold during the year), . . . . .		35.00
11	" Newport Water Works (sold during the year), . . . . .		44.00
Amounts carried forward, . . . . .		\$2,443,674.18	\$39,274.98

## SPECIAL INVESTMENTS

53

	Principal.	Net Income.
Amounts brought forward, . . . . .	\$2,443,674.18	\$99,374.98
<b>Frederick Sheldon (part) (continued).</b>		
60 shares U. S. Life Insurance Co. (sold during the year), . . . . .	.....	126.00
100/15000th Trust Estate Hastings & Dak. Ry. Co.,	300.00	137.50
<b>Gordon McKay Endowment (part),</b>		
21,000 American Agricultural & Chemical Co. 4½'s of 1928, . . . . .	21,367.50	.....
\$120,000 American Tel. & Tel. 4's of 1929, . . . . .	114,000.00	4,800.00
18,000 Butte Electric & Power Co. 1st M. 5's of 1951 (sold during the year), . . . . .	.....	430.00
6,000 Central Branch R'y 4's of 1919 (sold during the year), . . . . .	.....	195.83
70,000 Florida East Coast R'y 1st M. 4½'s of 1959 (sold during the year), . . . . .	.....	3,184.25
200,000 Interborough Rapid Transit 5's of 1952, . . . . .	203,505.50	10,645.28
35,000 Kansas City Railway & Light 6's of 1912, . . . . .	35,000.00	1,050.00
12,000 Madison River Power Co. 1st M. 5's of 1935, . . . . .	11,975.00	300.00
16,000 Minneapolis General Electric 5's of 1934, . . . . .	16,120.00	.....
100,000 Kanawha & Michigan 5's of 1927, . . . . .	95,500.00	5,000.00
25,000 National Railways of Mexico 4½'s of 1957, . . . . .	22,343.75	.....
80,000 New York, N. H. & H. Deb. 4's of 1955, . . . . .	78,800.00	3,200.00
61,000 N. Pacific-Great N. Joint 4's of 1921 (sold during the year), . . . . .	.....	1,572.44
12,000 Puget Sound Electric 5's of 1932, . . . . .	11,760.00	300.00
1,000 St. Joseph & Grand Island R'y 4's of 1947 (sold during the year), . . . . .	.....	35.78
14,000 Seattle Electric R'y 5's of 1952, . . . . .	4,160.00	.....
25,000 Wabash Equip. Serv. Co. 4½'s of 1915 (sold during the year), . . . . .	.....	1,006.25
300 shares Great Northern, . . . . .	44,250.00	2,100.00
240 " Northern Pacific, . . . . .	35,400.00	1,680.00
165 " Pennsylvania, . . . . .	10,875.00	483.75
<b>Price Greenleaf. (\$255.57 deducted from income for sinking premiums.) The total amount of this Fund is \$787,013.82, which is invested as follows :</b>		
\$70,000 Broadway Realty Co. Purchase money 1st M. 5's of 1926, . . . . .	72,671.04	3,315.80
4,000 Burl. & Mo. River R. R. in Nebraska non-exempt 6's of 1918, . . . . .	4,000.00	510.00
43,500 Central Vermont R'y 1st M. 4's of 1920, . . . . .	37,845.00	1,740.00
3,000 Chicago, Burl. & Quincy R. R. 4's of 1922, . . . . .	2,880.00	120.00
50,000 Chicago Junction Railways & Union Stock Yards Coll. Trust 5's of 1915, . . . . .	47,000.00	2,500.00
20,000 Cleveland R'y Ref. M. 5's of 1931, . . . . .	20,000.00	975.00
30,000 Commonwealth Power Co. 1st M. 5's of 1924, . . . . .	29,850.00	1,500.00
35,000 Galveston Electric Co. 1st M. 5's of 1940, . . . . .	32,900.00	481.25
Amounts carried forward, . . . . .	\$3,896,176.97	\$146,668.61

	Principal.	Net Income.
Amounts brought forward, . . . . .	\$658,029.18	\$16,834.53
<b>Riverside,</b>		
11 shares Harvard Riverside Associates, . . . . .	11,000.00	.....
<b>Henry Villard,</b>		
University Houses and Lands, . . . . .	50,000.00	893.24
<b>William F. Weld,</b>		
University Houses and Lands, . . . . .	100,000.00	1,786.47
<b>COLLEGE</b>		
<b>Daniel A. Buckley (part),</b>		
Real Estate in Cambridge, Mass., . . . . .	66,345.59	7,045.08
"    "    Deer Isle, Me., . . . . .	1.00	.....
<b>George Newhall Clark,</b>		
100 shares St. Joseph R'y, Light, Heat & Power Co. pref'd, . . . . .	10,000.00	500.00
<b>Edward W. Codman (part),</b>		
2 shares Pacific Mills, . . . . .	4,600.00	160.00
15 "    Barristers Hall Trust, . . . . .	1,085.00	60.00
12 "    Boston Real Estate Trust, . . . . .	14,841.50	517.50
<b>Edward Erwin Coolidge,</b>		
200 shares U. S. Smelting, Ref. & Mining Co. pref'd,	9,000.00	700.00
<b>T. Jefferson Coolidge, for Research in Physics,</b>		
648 shares Massachusetts Electric Cos., cum. pref'd,	59,805.25	3,500.00
<b>Eliot Professorship (Jonathan Phillips's Gift),</b>		
\$10,000 City of Boston 3½'s of 1920, . . . . .	10,000.00	350.00
<b>Professorship of Hygiene (part),</b>		
Policy of Mass. Hospital Life Insurance Co., . .	5,000.00	306.25
35 shares American Smelting & Refining Co., . .	3,112.32	285.83
60 "    American Tel. & Tel. Co., . . . . .	6,250.00	420.00
40 "    Chicago, Milwaukee & St. Paul, . . . .	4,000.00	240.00
<b>Charles Eliot Norton Fellowship,</b>		
\$15,000 Northern Pacific-Great Northern Joint 4's (C. B. & Q. collateral) of 1921, . . . . .	14,100.00	600.00
5,000 Louisville & Nashville Unified M. 4's of 1940,	5,000.00	300.00
<b>George Foster Peabody Scholarship,</b>		
\$6,000 Mexican Coal & Coke Co. 1st M., S. F. 5's of 1926, . . . . .	4,800.00	.....
<b>John K. Paine Music Fellowship,</b>		
Mortgage Notes, . . . . .	28,000.00	371.25
<b>Sarah E. Potter Endowment (part),</b>		
100 shares Boston & Albany (sold during the year),	.....	250.00
100 "    Massachusetts Electric Cos., cum. pref'd (sold during the year), . . . . .	.....	300.00
60 "    Plymouth Cordage Co., . . . . .	11,000.00	420.00
12 "    Pureoxia Co., . . . . .	60.00	5.40
Amounts carried forward, . . . . .	\$1,070,529.74	\$34,545.55

	Principal.	Net Income.
Amounts brought forward, . . . . .	\$1,070,529.74	\$34,545.55
<b>William Reed Scholarship,</b>		
\$1,000 New York Central & H. R. Gold 3½'s of 1937,	1,000.00	35.00
1,000 Norfolk and Western Divisional 1st lien & gen. M. 4's of 1944, . . . . .	1,000.00	40.00
2,000 Northern Pacific-Great Northern Joint 4's (C. B. & Q. collateral) of 1921, . . . . .	2,000.00	80.00
<b>Nelson Robinson Jr. Additional (part),</b>		
1,750 shares Gauley Coal Land Co. preferred, . .	175,000.00	.....
<b>Elisa O. and Mary P. Ropes (part),</b>		
100 shares Chicago, Milwaukee & St. Paul, . . .	13,087.50	600.00
100 " Northern Pacific, . . . . .	11,986.50	700.00
220 " Pennsylvania, . . . . .	12,987.50	645.00
<b>Dunlap Smith Scholarship,</b>		
\$5,000 Metropolitan West Side Elevated R. R. Ex- tension M. 4's of 1938, . . . . .	4,700.00	200.00
<b>Stoughton Scholarship (part),</b>		
Real Estate in Dorchester, . . . . .	3,294.30	70.48
<b>Teachers' Endowment (part),</b>		
\$5,000 Broadway Realty Co. Purchase Money, 2d M. 5's of 1916, . . . . .	5,000.00	250.00
50,000 Wisconsin Central, Minneapolis Terminal Purchase Money M. 3½'s of 1950, . . . . .	50,000.00	1,750.00
10 shares Harvard Riverside Associates, . . . . .	10,000.00	.....
<b>Wales Professorship of Sanskrit,</b>		
Real Estate, Cornhill, Boston (sold during the year), . . . . .	.....	1,290.71
<b>Samuel Ward's Gift (part),</b>		
Ward's (Bumkin) Island, Boston Harbor, . . . .	1.00	.....
<b>J. Palmer Welsh Memorial (part),</b>		
\$1,000 Ontario Power Co. 5's of 1943, . . . . .	1,000.00	50.00
<b>LIBRARY</b>		
<b>William R. Castle,</b>		
\$1,000 Honolulu Gas Co., Limited, 6's of 1925, . .	1,000.00	60.00
<b>Francis Parkman Memorial (part),</b>		
\$5,000 Louisville & Jeffersonville Bridge 1st M. Gold 4's of 1945, . . . . .	4,500.00	200.00
<b>Ichabod Tucker (part),</b>		
Policy of Mass. Hospital Life Insurance Co., . . .	5,000.00	206.25
<b>John Harvey Treat (part),</b>		
130 Shares Treat Hardware Supply Co., . . . . .	6,500.00	390.00
75 " United Shoe Machinery Co., . . . . .	4,060.00	150.00
Deposit in Lawrence Savings Bank (withdrawn), .	.....	32.88
Amounts carried forward, . . . . .	\$1,382,686.54	\$41,295.87

	Principal.	Net Income.
Amounts brought forward, . . . . .	\$1,382,686.54	\$41,295.87

## LAW SCHOOL

<b>Joshua M. Sears Memorial,</b>		
\$14,000 Illinois Steel Co. Deb. 5's of 1918, . . .	14,000.00	350.00
10,000 Minneapolis General Electric, Gold M. 5's of 1934, . . . . .	10,000.00	.....
10,000 New England R.R. Consol. M. 5's of 1945,	10,000.00	.....

## MEDICAL SCHOOL

<b>John C. Cutter Bequest,</b>		
\$6,000 Carthage Water Power Co., 1st M. 5 % Notes,	1.00	.....
Deposit in Leicester Savings Bank (withdrawn during the year), . . . . .	.....	10.00
<b>Calvin and Lucy Ellis (part),</b>		
\$40,000 Northern Pacific-Great Northern Joint 4's (C. B. & Q. collateral) of 1921, . . . . .	26,585.00	1,600.00
Real Estate in Boston (half interest in), (sold during the year), . . . . .	.....	102.67
Real Estate in Eden, Bar Harbor, Maine, . . . .	10,000.00	.....
<b>Hamilton Kuhn Memorial (part),</b>		
\$14,000 Burl. & Mo. in Nebr. non-ex. 6's of 1918, .	14,570.00	840.00
20,000 Kansas C., Mem. & Birm. Inc. 5's of 1934, .	17,600.00	1,000.00
10,000 U. Elec. Sec. Coll. Tr. 5's of 1937, 26th ser.,	10,000.00	500.00
189 shares Edison Elec. Ill'm'ng Co. of Boston (sold during the year), . . . . .	.....	1,134.00
<b>Robert Charles Billings (part),</b>		
Real Estate, Wigglesworth St. & Power House, Vila St., Boston, . . . . .	68,267.67	.....
<b>George C. Shattuck (part),</b>		
\$25,000 Kansas City, Fort Scott & Memphis R. R. Cons. M. 6's of 1928 (\$203.70 deducted from in- come for sinking premium), . . . . .	28,259.30	1,296.30
<b>Henry P. Walcott Fellowship in Clinical Medi- cine (part), . . . . .</b>		
\$6,000 J. M. Guffey Petroleum Co. 1st M. 5's of 1912 (paid during the year), . . . . .	.....	300.00
5,000 J. M. Guffey Petroleum Co. 1st M. 5's of 1918,	5,000.00	250.00
2,000 " " " 1914,	2,000.00	100.00

## MUSEUM OF COMPARATIVE ZOOLOGY

<b>Maria Whitney,</b>		
\$2,000 City of Providence 4's of 1911 (paid during the year), . . . . .	.....	40.00
<b>Alex. Agassiz Bequest, Clause XI,</b>		
Real Estate in Cambridge, . . . . .	50,000.00	.....
Amounts carried forward, . . . . .	\$1,648,919.51	\$48,818.84

## SPECIAL INVESTMENTS

51

	Principal.	Net Income.
Amounts brought forward, . . . . .	\$1,648,919.51	\$48,818.84

## OBSERVATORY

**Advancement of Astronomical Science (1902),**

15 shares Calumet & Hecla Mining Co., . . . . .	9,000.00	450.00
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PEABODY MUSEUM OF AMERICAN ARCHAEOLOGY  
AND ETHNOLOGY

<b>Peabody Building (part),</b> }	\$54,000 Kansas & Mis-	11,512.72	622.32
<b>Peabody Collection (part),</b> }	souri R. R. 1st M. 5's	19,218.64	1,038.84
<b>Peabody Professor (part),</b> }	of 1922,	19,218.64	1,038.84

**Thaw (part) (\$8.47 deducted from income for sinking premium),**

\$20,000 Girard Point Storage Co. 1st M. 3½'s of 1940,	20,237.31	691.53
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## ARNOLD ARBORETUM

**Robert Charles Billings,**

\$5,000 Butte Water Co. 1st M. 5's of 1921, . . . . .	4,000.00	250.00
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## BUSSEY INSTITUTION

**Woodland Hill,**

Laboratory of Comparative Pathology building, . .	20,658.86	1,000.00
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## SPECIAL FUNDS

**Anonymous (1912),**

\$5,000 Newton Street Railway 1st M. 5's of 1912, .	5,000.00	.....
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**Bussey Trust (part),**

Real Estate in Boston, . . . . .	381,972.12	30,133.14
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**Fund of the Class of 1834,**

Policy of Mass. Hospital Life Insurance Co., . . .	1,000.00	41.25
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**Fund of the Class of 1844,**

Policy of Mass. Hospital Life Insurance Co., . . .	6,500.00	268.13
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**Fund of the Class of 1853,**

Policy of Mass. Hospital Life Insurance Co., . . .	3,725.00	153.66
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**Calvin and Lucy Ellis Aid (part),**

Real Estate in Boston (half interest in), (sold during the year), . . . . .	.....	102.68
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11 shares Massachusetts Cremation Society, . . .	1.00	5.50
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**Charles L. Hancock Bequest (part),**

Real Estate in Chelsea and Chicago, . . . . .	65,001.00	4,765.95
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**Freshman Dormitories,**

**\$20,000 Mahoning & Shenango R'y & Light, 1st**

Consol. Ref. M. 5's of 1916, . . . . .	20,000.00	.....
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Amounts carried forward, . . . . .	\$2,235,964.80	\$89,880.68
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		Principal.	Net Income.
Amounts brought forward, . . . . .		\$2,235,964.80	\$89,380.68
<b>Anonymous,</b>			
\$30,000	Massachusetts 8's of 1930, . . . . .	20,000.00	600.00
5,000	" " 1939, . . . . .	5,000.00	150.00
19,000	" " 1941, . . . . .	19,000.00	570.00
4,000	" 3½'s 1915 (sold during year), . . . . .		95.28
6,000	" " 1916, " " " . . . . .		142.92
6,000	" " 1917, " " " . . . . .		142.92
2,000	" 8's 1918, " " " . . . . .		47.64
5,000	" " 1920, " " " . . . . .		104.52
10,000	" " 1923, " " " . . . . .		175.00
5,000	" " 1935, " " " . . . . .		148.26
12,000	" " 1940, " " " . . . . .		280.00
189 shares	Edison Electric Ill'm'ng Co. of Boston, . . . . .	55,188.00	1,134.00
<b>Robert Troup Paine (accumulating) (\$127.07 deducted from income for sinking premiums),</b>			
\$38,000	Massachusetts 3½'s of 1913 (sold during year), . . . . .		1,275.11
5,000	" " 1916, . . . . .	5,083.44	154.15
29,000	" " 1935, . . . . .	28,258.80	343.85
31,000	" " 1938, . . . . .	29,623.14	25.98
2,000	" " 1936, . . . . .	1,885.00	.....
<b>George Smith Bequest (part),</b>			
\$10,000	Duquoin, Ill., Water Works Co. 6's of 1901, . . . . .	1.00	.....
20,000	Laclede Gas Light Co. 5's of 1919, . . . . .	20,000.00	1,000.00
200 shares	Laclede Gas Light Co., preferred, . . . . .	18,800.00	1,140.00
20	" " " " " common, . . . . .		
<b>Frederick Sheldon (part),</b>			
\$2,000	New York Gas & Electric Light, Heat & Power Co. 4's of 1949 (sold during year), . . . . .		98.67
2,000	Twenty-eighth and Twenty-ninth Street Crosstown Ry. 1st M. 5's of 1996, . . . . .	500.00	.....
20 shares	Astor Trust Co. (sold during year), . . . . .		120.00
23	" Bank of America, " " " . . . . .		621.00
82	" Consolidated Gas Co. of New York (sold during the year), . . . . .		369.00
11	" Corn Exchange Bank (sold during the year), . . . . .		132.00
100	" Manhattan Trust Co. (sold during the year), . . . . .		540.00
23	" Mexican Telegraph Co., . . . . .	4,370.00	230.00
50	" New York Loan & Improvement Co., (sold during the year), . . . . .		175.00
7	" Newport Trust Co. (sold during the year), . . . . .		35.00
11	" Newport Water Works (sold during the year), . . . . .		44.00
Amounts carried forward, . . . . .		\$2,443,674.18	\$99,274.98

	Principal.	Net Income.
Amounts brought forward, . . . . .	\$2,448,674.18	\$99,274.98
<b>Frederick Sheldon (part) (continued).</b>		
60 shares U. S. Life Insurance Co. (sold during the year), . . . . .	.....	126.00
100/15000th Trust Estate Hastings & Dak. Ry. Co.,	800.00	137.50
<b>Gordon McKay Endowment (part),</b>		
21,000 American Agricultural & Chemical Co. 4½'s of 1928, . . . . .	21,867.50	.....
\$120,000 American Tel. & Tel. 4's of 1929, . . . .	114,000.00	4,800.00
18,000 Butte Electric & Power Co. 1st M. 5's of 1951 (sold during the year), . . . . .	.....	430.00
6,000 Central Branch R'y 4's of 1919 (sold during the year), . . . . .	.....	195.83
70,000 Florida East Coast R'y 1st M. 4½'s of 1959 (sold during the year), . . . . .	.....	3,184.25
200,000 Interborough Rapid Transit 5's of 1952, .	203,505.50	10,645.28
35,000 Kansas City Railway & Light 8's of 1912, .	35,000.00	1,050.00
12,000 Madison River Power Co. 1st M. 5's of 1935,	11,975.00	800.00
16,000 Minneapolis General Electric 5's of 1934,	16,120.00	.....
100,000 Kanawha & Michigan 5's of 1927, . . . .	95,500.00	5,000.00
25,000 National Railways of Mexico 4½'s of 1957,	22,343.75	.....
80,000 New York, N. H. & H. Deb. 4's of 1955, .	78,800.00	3,200.00
61,000 N. Pacific-Great N. Joint 4's of 1921 (sold during the year), . . . . .	.....	1,572.44
12,000 Puget Sound Electric 5's of 1932, . . . .	11,760.00	300.00
1,000 St. Joseph & Grand Island R'y 4's of 1947 (sold during the year), . . . . .	.....	35.78
14,000 Seattle Electric R'y 5's of 1952, . . . . .	4,160.00	.....
25,000 Wabash Equip. Serv. Co. 4½'s of 1915 (sold during the year), . . . . .	.....	1,006.25
300 shares Great Northern, . . . . .	44,250.00	2,100.00
340 " Northern Pacific, . . . . .	35,400.00	1,680.00
165 " Pennsylvania, . . . . .	10,875.00	483.75
<b>Price Greenleaf. (\$355.57 deducted from income for sinking premiums.) The total amount of this Fund is \$787,013.82, which is invested as follows:</b>		
\$70,000 Broadway Realty Co. Purchase money 1st M. 5's of 1926, . . . . .	72,671.04	3,315.80
4,000 Burl. & Mo. River R. R. in Nebraska non-exempt 6's of 1918, . . . . .	4,000.00	510.00
43,500 Central Vermont R'y 1st M. 4's of 1920, .	37,845.00	1,740.00
3,000 Chicago, Burl. & Quincy R. R. 4's of 1922,	2,880.00	120.00
50,000 Chicago Junction Railways & Union Stock Yards Coll. Trust 5's of 1915, . . . . .	47,000.00	2,500.00
20,000 Cleveland R'y Ref. M. 5's of 1931, . . . .	20,000.00	975.00
30,000 Commonwealth Power Co. 1st M. 5's of 1924,	29,850.00	1,500.00
35,000 Galveston Electric Co. 1st M. 5's of 1940,	32,900.00	481.25
Amounts carried forward, . . . . .	\$3,396,176.97	\$146,663.61



## SPECIAL INVESTMENTS

	Principal.	Net Income.
Amounts brought forward, . . .	\$3,396,176.97	\$146,663.61
<b>Price Greenleaf (continued).</b>		
\$8,000 Kansas City, Fort Scott & Memphis cons.		
M. 6's of 1928, . . . . .	9,141.98	408.63
50,000 Metropolitan Tel. & Tel. Co. 1st M. 5's of 1918,	49,750.00	2,500.00
34,000 New York Central & Hudson River R. R.		
(Michigan Central Collateral) 3½'s of 1998,	28,412.10	1,190.00
3,644.25 New York Railways Co. 1st R. E. & Ref.		
M. 4's of 1942, . . . . .	2,860.73	.....
18,000 New York Railways Co. Adj. M. 5's of 1942,	9,450.00	.....
32,000 Northern Pacific—Great Northern Joint 4's		
(C. B. & Q. collateral) of 1921, . . . .	19,993.55	1,280.00
50,000 Union Pacific R. R. 1st M. & L. G. 4's of 1947,	44,625.00	2,000.00
50,000 Note of Arlington Mills, . . . . .	50,000.00	2,281.25
25,000 " " Hamilton Manufacturing Co (paid		
during the year), . . . . .	.....	593.75
50,000 " " Massachusetts Cotton Mills, . . .	50,000.00	2,312.50
360 shares Boston & Lowell R. R., . . . . .	46,800.00	2,880.00
237 " Fitchburg R. R., preferred, . . . .	22,306.27	1,185.00
56 " Great Northern, preferred, . . . .	13,125.00	392.00
40 " " Iron Ore Properties, . . . . .	.....	.....
355 " Old Colony R. R., . . . . .	63,190.00	2,485.00
27 " N. Y. Central & Hudson River R. R., .	2,866.28	135.00
290 " Northern R. R. (N. H.), . . . . .	29,290.00	1,740.00
52 " West End Street Railway, preferred, .	4,305.56	208.00
34 " Central Vermont R'y, . . . . .	428.72	.....
778 " Pennsylvania R. R., . . . . .	55,406.04	2,280.75
21 " Boston Real Estate Trust, . . . . .	27,483.25	900.00
100 " Paddock Building Trust, . . . . .	10,000.00	350.00
Cash in American Trust Co., . . . . .	433.30	93.97
	<u>\$3,936,044.75</u>	<u>\$171,879.46</u>

## SUMMARY:

Cash, Exhibit A, . . . . .	\$433.30
Securities, Exhibit A, . . . . .	2,469,684.73
Land and Buildings, Exhibit A. . . . .	1,465,926.72
	<u>\$3,936,044.75</u>
Interest and Dividends, Exhibit B, . . . . .	\$108,038.01
Rents, Land and Buildings, Exhibit B, . . . . .	63,841.45
	<u>\$171,879.46</u>

**SCHEDULE 2**

**SECURITIES—GENERAL INVESTMENTS**

June 30, 1912

<b>Mortgages and Other Loans.</b>	<b>Principal.</b>	<b>Income.</b>
Mortgages, . . . . .	\$906,000.00	
Advances to Bussey Trust, . . . . .	312,499.08	
Abbeville Cotton Mills Note, . . . . .	50,000.00	
American Woolen Co.'s Note, . . . . .	50,000.00	
Boott Mills Notes, . . . . .	50,000.00	
Curtis and Sanger's Note, . . . . .	50,000.00	
Everett Mills Note, . . . . .	50,000.00	
Hamilton Manufacturing Co.'s Note, . . . . .	50,000.00	
Harmony Mills Notes, . . . . .	50,000.00	
Indian Head Mills of Alabama Note, . . . . .	50,000.00	
Merchant & Miners Transportation Co.'s Notes, . . . . .	50,000.00	
Merrimack Manufacturing Co.'s Note, . . . . .	25,000.00	
Nashua Manufacturing Co.'s Note, . . . . .	100,000.00	
New England Cotton Yarn Co.'s Note, . . . . .	50,000.00	
Pacific Mills Note, . . . . .	100,000.00	
Waltham Watch Co.'s Note, . . . . .	50,000.00	
York Manufacturing Co.'s Note, . . . . .	50,000.00	
	<u>\$2,043,499.08</u>	<u>\$87,272.68</u>
<b>Public Funds.</b>		
\$94,000 United States of Mexico 4's of 1954, . . . . .	\$87,250.00	\$3,760.00
<b>Railroad Bonds.</b>		
\$100,000 Baltimore & Ohio 1st M. 4's of 1948, . . . . .	\$96,625.00	\$4,000.00
100,000 B. & O. (S. W. Div.) 1st M. 3½'s of 1925, . . . . .	89,750.00	3,500.00
100,000 Baltimore & Ohio (Pittsburg, Lake Erie & West Virginia) Ref. M. 4's of 1941, . . . . .	99,250.00	4,000.00
125,000 Bangor & Aroostook Cons. Ref. M. 4's of 1951, . . . . .	118,750.00	5,000.00
51,000 Burl. & Mo. in Nebr. non-ex. 6's of 1918, . . . . .	51,000.00	3,366.00
50,000 Canadian Northern R'y Equipment 4½'s of 1918, . . . . .	50,000.00	.....
444,000 Chicago, Burl. & Quincy 3½'s of 1949, . . . . .	454,959.09	15,248.80
150,000 " " Gen. M. 4's of 1958, . . . . .	145,250.00	6,000.00
200,000 C. B. & Q. (Illinois Div.) 4's of 1949, . . . . .	200,822.24	7,977.78
28,700 Chicago, Milwaukee, & St. Paul Conv. 4½'s of 1932, . . . . .	28,700.00	.....
100,000 Chicago & No. Western Gen. M. 3½'s of 1987, . . . . .	100,888.41	3,488.28
100,000 Chicago, Rock Island & Pacific Gen. M. 4's of 1988, . . . . .	105,971.98	3,920.90
192,000 Duluth, Missabe & Northern General M. 5's of 1941, . . . . .	205,171.43	9,228.81
Amounts carried forward, . . . . .	\$1,747,138.15	\$65,720.52

	Principal.	Income.
Amounts brought forward, . . .	\$1,747,138.15	\$65,720.52
<b>Railroad Bonds (continued).</b>		
\$100,000 Indiana, Ill. & Iowa 1st M. 4's of 1950,	96,500.00	4,000.00
200,000 Kansas City, Fort Scott & Memphis Cons. M. 6's of 1928, . . . . .	230,896.58	10,068.97
114,000 Kansas City, Memphis & Birmingham (assented) Income 5's of 1934, . . .	103,500.00	5,700.00
100,000 Lake Shore & Michigan Southern Deb. 4's of 1931, . . . . .	93,250.00	4,000.00
300,000 Long Island Unified M. 4's of 1949, . .	283,257.50	12,000.00
200,000 Louisville & Jeffersonville Bridge Co. 1st M. 4's of 1945, . . . . .	191,000.00	8,000.00
100,000 Minneapolis Union 1st M. 5's of 1922, .	101,331.62	4,866.83
100,000 Montana Central 1st M. 6's of 1937, . .	128,515.59	4,859.37
300,000 New York Central & H. R. (L. S. & M. S. Coll.) 3½'s of 1938, . . . . .	294,464.40	10,500.00
25,000 New York, New Haven & Hartford Con- vertible Deb. 6's of 1948, . . . . .	25,000.00	1,500.00
100,000 New York, New Haven & Hartford Deb. 4's of 1955, . . . . .	105,375.00	3,875.00
200,000 New York, Ontario & Western Ref. M. 4's of 1992, . . . . .	209,269.36	7,884.13
343,000 Northern Pacific-Great Northern Joint 4's (C. B. & Q. Coll.) of 1921, . . .	164,325.92	13,720.00
100,000 Oregon Short Line Cons. 1st M. 5's of 1946,	114,176.80	4,583.03
100,000 Oregon Short Line Ref. M. 4's of 1929,	96,875.00	4,000.00
40,000 Pennsylvania Co. 3½'s of 1916, . . . .	37,875.00	1,505.00
250,000 Richmond-Washington Co. Coll. Trust 4's of 1943, Series C, . . . . .	255,144.65	9,834.05
100,000 St. Louis & San Francisco Ref. M. 4's of 1951, . . . . .	97,125.00	4,000.00
£40,000 St. Paul, Minneapolis & Manitoba (Paci- fic Extension) 4's of 1940, . . . . .	300,145.42	7,535.55
\$100,000 Southern Pacific 1st Ref. M. 4's of 1955,	97,062.50	4,000.00
100,000 Southern Pacific Conv. 4's of 1929 . .	99,625.00	4,000.00
200,000 Terminal R. R. Association of St. Louis Gen. M. Ref. 4's of 1953, . . . . .	200,000.00	8,000.00
400,000 Union Pacific 1st M. & L. G. 4's of 1947,	353,114.75	16,000.00
100,000 " " Conv. 4's of 1927, . . . .	95,392.50	4,000.00
	<u>\$5,420,360.74</u>	<u>\$224,152.45</u>
<b>Traction Bonds.</b>		
\$150,000 Boston & Northern Street R'y 1st M. Ref. 4's of 1954 (sold during the year), . . . . .		\$6,577.78
200,000 Chicago Railways 1st M. 5's of 1927, .	198,383.35	9,930.56
100,000 Cleveland Railway Ref. M. 5's of 1931,	100,000.00	4,875.00
300,000 Interborough-Metropolitan Coll. Trust 4½'s of 1956, . . . . .	254,782.50	13,500.00
Amounts carried forward, . . . .	\$553,115.85	\$34,883.34

## GENERAL INVESTMENTS

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	Principal.	Income.
Amounts brought forward, . . . .	\$558,115.85	\$34,883.84
<b>Traction Bonds (continued).</b>		
\$303,000 Interborough Rapid Transit Co. Gold M. 5's of 1952, . . . . .	297,725.38	15,150.
75,000 Kansas City Terminal R'y 1st M. Gold 4's (sold during the year), . . . . .	.....	1,608.33
100,000 Metrop. Street R'y of Kansas City Consol. M. 5's of 1913, . . . . .	99,000.00	5,000.00
100,000 Metrop. West Side Elevated 4's of 1938, 100,000 " " " Ext. M. 4's of 1938, . . . . .	91,746.25	4,000.00
150,000 Montreal Tramways Co. 1st M. Ref. 5's of 1941, . . . . .	97,000.00	4,000.00
70,632.50 New York Railways Co. Adj. M. 5's of 1942, . . . . .	149,625.00	770.84
15,222 New York Railways Co. 1st R. E & Ref. M. 4's of 1942, . . . . .	37,082.06	.....
100,000 New York, Westchester & Boston R'y 1st M. 4½'s of 1946, . . . . .	11,949.27	.....
100,000 Northern Texas Traction Co. 1st M. 5's of 1933, . . . . .	96,250.00	1,827.50
800,000 Old Colony Street R'y 1st M. Ref. 4's of 1954, . . . . .	100,000.00	2,500.00
200,000 Puget Sound Traction, Light & Power Co. 5% M. Gold Notes of 1914, . . . .	270,500.00	5,844.44
100,000 Portland R'y Light & Power Co., 1st M. 5's of 1942, . . . . .	201,000.00	.....
100,000 Second Ave. (N. Y.) Con. M. 5's of 1948, 93,000 Third Avenue (N. Y.) 1st Consol. M. 4's of 2000, . . . . .	95,500.00	.....
100,000 United Traction & Electric Co. 1st M. 5's of 1933, . . . . .	115,789.60	.....
	94,052.38	.....
	109,163.60	4,563.63
	<u>\$2,419,499.37</u>	<u>\$80,158.08</u>
<b>Sundry Bonds.</b>		
\$100,000 American Agricultural Chemical Co. 5's of 1928, . . . . .	\$101,328.56	\$4,914.28
300,000 American Tel. & Tel. Co. 4's of 1929, .	286,000.00	11,800.00
100,000 Boston Electric Light Co. 1st Cons. M. 5's of 1924 (sold during the year), . .	.....	2,111.12
145,000 Broadway Realty Co. Purchase money 1st M. 5's of 1926, . . . . .	152,014.27	6,766.25
100,000 Calumet & Hecla Mining Co. 5% Coupon Notes of 1919, . . . . .	101,400.00	7,397.22
250,000 Chicago Junction Railways and Union Stock Yards Coll. Trust 5's of 1915, .	250,060.40	12,479.85
100,000 Chicago Junction Railways and Union Stock Yards 4's of 1940, . . . . .	98,500.00	4,000.00
Amounts carried forward, . . .	\$989,803.23	\$49,468.72

## GENERAL INVESTMENTS

	Principal.	Income.
Amounts brought forward, . .	\$989,808.23	\$49,468.72
<b>Sundry Bonds (continued).</b>		
\$100,000 Chicago Telephone Co. 5's of 1928, . .	102,350.00	291.67
150,000 Detroit Edison Co. 1st M. 5's of 1933, .	152,534.50	7,376.28
50,000 Electric Securities Corp. 5's of 1940, 9th series, . . . . .	50,000.00	1,480.56
300,000 Illinois Steel Co. Deb. 4½'s of 1940, . .	284,250.00	8,537.50
100,000 Madison River Power Co. 1st M. 5's of 1935, . . . . .	85,000.00	5,000.00
50,000 Massachusetts Gas Co.'s S. F. 4½'s of 1929, . . . . .	48,875.00	2,250.00
100,000 Minneapolis General Electric Co. Gen. M. 5's of 1934, . . . . .	101,906.82	4,915.26
100,000 Michigan State Telephone Co. 5's of 1924,	100,000.00	4,583.33
100,000 Montreal Light, Heat and Power Co. 1st M. Coll. Trust 4½'s of 1932 (sold during the year), . . . . .	.....	4,337.50
100,000 Municipal Gas & Electric Co. of Roches- ter, N. Y., 1st M. 4½'s of 1942, . . .	100,000.00	4,500.00
100,000 New England Tel. & Tel. Co. 5's of 1916,	103,764.66	4,068.83
75,000 New York Tel. Co. Gen. M. Gold S. F. 4½'s (sold during the year), . . . . .	.....	1,128.40
100,000 Pacific Coast Power 5's of 1940, . . .	96,000.00	4,069.40
55,000 Pejescot Paper Co. 1st M. 5's of 1917	54,450.00	2,750.00
45,000 " " " " " of 1921	44,550.00	2,250.00
200,000 Portland Gen'l Elec. 1st M. 5's of 1935,	202,830.79	9,876.93
100,000 Railway & Light Securities Co. Coll. Trust 5's of 1935, 1st series . . . . .	100,784.10	4,965.90
100,000 Railway & Light Securities Co. Coll. Trust 5's of 1939, 2d series, . . . .	100,000.00	5,000.00
100,000 Railway & Light Securities Co. Coll. Trust 5's of 1939, 3rd series, . . . .	98,000.00	5,000.00
200,000 San Francisco Gas & Electric Co. 4½'s of 1938, . . . . .	187,000.00	4,312.50
200,000 Southern Power Co. 1st M. 5's, of 1930,	197,500.00	8,805.55
191,000 St. Louis National Stock Yards Co. 1st M. 4's of 1930, . . . . .	184,465.00	7,353.11
100,000 Tacoma Railway & Power Co. 1st M. 5's of 1929, . . . . .	100,940.00	4,980.00
50,000 United Electric Securities Co. Coll. Trust 5's of 1936, 24th series, . . .	50,000.00	2,500.00
50,000 United Electric Securities Co. Coll. Trust 5's of 1938, 27th series, . . .	49,250.00	3,084.72
50,000 United Electric Securities Co. Coll. Trust 5's of 1939, 29th series (sold during the year), . . . . .	.....	1,076.39
25,000 United Electric Securities Co. Coll. Trust 5's of 1940, 32nd series, . . .	25,241.07	699.40
Amounts carried forward, . . .	\$3,608,895.17	\$164,551.94

	Principal.	Income.
Amount brought forward, . . . .	\$3,608,895.17	\$164,551.64
Sundry Bonds ( <i>continued</i> ). . . . .		
\$100,000 United Electric Securities Co., Coll. Trust 5's of 1942, 38th series, . . .	100,000.00	.....
150,000 United Fruit Co. 4½'s of 1925, . . . .	143,750.00	6,206.25
100,000 United States Smelting, Refining & Mining Co. 5's of 1914, . . . . .	98,000.00	1,986.11
100,000 Washington Water Power Co. 5's of 1939,	100,360.01	4,966.67
200,000 Western Elec. Co. 1st M. 5's of 1922, .	199,000.00	9,944.44
100,000 Westinghouse Electric Manufacturing Co. 5% Notes of 1917, . . . . .	94,625.00	5,000.00
	<u>\$4,344,130.18</u>	<u>\$192,675.41</u>
Railroad Stocks. . . . .		
700 shares Baltimore & Ohio, . . . . .	\$70,362.50	\$4,200.00
507 " Chicago, Milwaukee & St. Paul, pfd., . . .	50,670.58	3,549.00
1268 " Chicago, Milwaukee & St. Paul, . . .	177,425.94	7,608.00
2282 " Chicago & No. Western, . . . . .	819,255.55	15,974.00
1837 " Great Northern, preferred, . . . . .	294,558.56	9,359.00
955 " Great Northern Iron Ore Properties, }		{ .....
800 " Louisville & Nashville, . . . . .	93,924.00	5,600.00
8 " Louisville Property . . . . .	1.00	.....
700 " Manhattan, . . . . .	92,762.50	4,900.00
2088 " New York Central & Hudson River, . . .	151,173.21	10,440.00
867 " New York, New Haven & Hartford, . . .	141,729.80	6,936.00
1000 " Northern Pacific, . . . . .	115,315.00	7,000.00
6851 " Pennsylvania, . . . . .	413,506.40	20,086.50
500 " Union Pacific, . . . . .	91,487.50	5,000.00
	<u>\$2,012,122.54</u>	<u>\$100,652.50</u>
Manufacturing and Telephone Stocks. . . . .		
2000 shares American Smelters Securities Co. 5% cumulative preferred, series B, . . .	\$196,000.00	\$8,338.33
2584 " American Tel. & Tel. Co., . . . . .	320,447.53	12,448.00
240 " Amoskeag Manufacturing Co., pref., . . .	} 8,654.00	1,800.00
360 " " " " " " " " " " " "		
2430 " General Electric Co., . . . . .	262,626.27	16,580.00
187 " Merrimack Manufacturing Co., . . . .	18,615.10	.....
24 " Pacific Mills, . . . . .	16,668.29	1,920.00
	<u>\$818,011.19</u>	<u>\$41,081.33</u>
Real Estate Trust Stocks. . . . .		
1000 shares Barristers Hall, . . . . .	\$92,766.00	\$4,000.00
250 " Business Real Estate, . . . . .	28,750.00	1,125.00
2500 " Department Store, . . . . .	220,291.88	11,250.00
1000 " Essex Street, . . . . .	100,000.00	4,000.00
750 " Kimball Building, . . . . .	75,000.00	2,250.00
1089 " Paddock Building, . . . . .	104,363.72	3,811.50
1000 " Post Office Square Building, . . . .	103,000.00	4,000.00
1000 " St. Paul Business Real Estate Assoc. . . .	100,000.00	4,000.00
Amounts carried forward, . . . .	\$819,171.60	\$34,436.50

## GENERAL INVESTMENTS

	Principal.	Income.
Amounts brought forward, . . . .	\$819,171.60	\$34,436.50
<b>Real Estate Trust Stocks (continued).</b>		
1000 " Tremont Building, . . . . .	100,000.00	4,500.00
1875 " Western Real Estate Trust, . . . .	196,500.00	11,718.75
	<u>\$1,115,671.60</u>	<u>\$50,655.25</u>
<b>Sundry Stocks.</b>		
611 shares Edison Elec. Illum. Co., Boston, Mass., . . . . .	\$124,927.50	\$7,332.00
1500 " Massachusetts Gas Companies, pref'd, . . . .	132,107.00	6,000.00
1222 " Trimountain Trust, . . . . .	114,009.50	3,896.57
	<u>\$371,044.00</u>	<u>\$17,228.57</u>
<b>SUMMARY:</b>		
Mortgages and Notes, . . . . .	\$2,043,499.08	\$87,272.63
Public Funds, . . . . .	87,350.00	3,760.00
Railroad Bonds, . . . . .	5,420,860.74	224,152.45
Traction Bonds, . . . . .	2,419,499.37	80,158.08
Sundry Bonds, . . . . .	4,344,130.18	192,675.41
Railroad Stocks, . . . . .	2,012,122.54	100,652.50
Manufacturing and Tel. Stocks, . . . . .	818,011.19	41,081.33
Real Estate Trust Stocks, . . . . .	1,115,671.60	50,655.25
Sundry Stocks, . . . . .	371,044.00	17,228.57
Total, Exhibit A, . . . . .	<u>\$18,681,588.70</u>	
Total, Exhibit B, . . . . .		<u>\$797,636.22</u>

## SCHEDULE 3

## LAND AND BUILDINGS—GENERAL INVESTMENT

June 30, 1912

Real Estate in Boston.	Principal.	Net Income.
Adams Estate, Washington Street, . . . . .	\$250,000.00	\$15,641.73
Amory Estate, Franklin Street, . . . . .	165,615.81	11,507.34
Cowdin Estate, Haymarket Square, . . . . .	36,000.00	1,877.13
Estate, 17 and 19 Haymarket Square, . . . . .	13,500.00	1,246.06
Estate, 20 and 21 Haymarket Square, . . . . .	58,913.52	2,942.05
Estate, 364 and 366 Washington St., . . . . .	110,000.00	5,509.84
Estate, 31 and 33 Otis and 112 Arch Streets, . . . .	55,000.00	733.94
Estate, 16 to 18 Union and 3 to 11 Friend Streets, . .	81,000.00	2,739.84
Faneuil Hall Square Estate, . . . . .	197,047.80	8,328.84
Gerrish Block, Blackstone and North Streets, . . .	192,875.75	7,928.25
Gray Estate, Washington Street, . . . . .	949,709.80	72,585.76
Jaynes Estate, Washington and Hanover Streets, . .	162,000.00	6,658.57
Lowell Estate, Washington Street, . . . . .	464,368.91	28,888.19
Old Boston Music Hall Estate, . . . . .	356,611.00	22,422.38
Townsend Estate, Hawkins Street, . . . . .	44,419.49	716.72
Webb Estate, Washington Street, . . . . .	164,604.79	19,256.92
Total, Exhibit A, . . . . .	<u>\$3,801,666.87</u>	
Total, Exhibit B, . . . . .		<u>\$308,973.66</u>

SCHEDULE 4

**FUNDS AND GIFTS**

June 30, 1912

[The date following the title of a Fund shows the year of its establishment.]

Principal, July 1, 1911.	UNIVERSITY FUNDS	Principal, June 30, 1912.
\$186,568.75	Anonymous (1910), . . . . .	\$184,766.25
46,877.95	Walter F. Baker (1909), . . . .	24,602.11
2,000.00	William H. Baldwin, Jr. (1906),	2,000.00
1,143.00	Band Music (1908), . . . . .	1,143.00
4,950.00	Andrew Bigelow (1898), . . . .	4,950.00
5,000.00	Stanton Blake (1889), . . . . .	5,000.00
4,771.33	Charlotte F. Blanchard (1891), .	4,771.33
5,250.00	Samuel D. Bradford (1866), . .	5,250.00
50,000.00	Martin Brimmer (1907), . . . .	50,000.00
100,000.00	James C. Carter (1906), . . . .	100,000.00
12,500.00	John W. Carter (1898), . . . . .	12,500.00
94,622.77	Class of 1883 (1908), . . . . .	94,722.77
9,777.10	Edward Erwin Coolidge (1906),	9,815.55
154.94	Thomas Cotton (1727), . . . . .	155.09
33,835.06	John Cowdin (1888), . . . . .	33,835.06
115,966.56	George B. Dorr (1882), . . . . .	115,966.56
48,458.50	George Draper (1892), . . . . .	48,458.50
56,788.00	R. H. Eddy (1901), . . . . .	56,788.00
101,225.49	Harvard Ellis (1895), . . . . .	101,225.49
20,918.57	Richard W. Foster (1905), . . .	20,918.57
5,322.09	John Davis Williams French (1901), . . . . .	5,322.09
20,571.18	Gore (1834), . . . . .	20,571.18
25,000.00	John C. Gray (1881), . . . . .	25,000.00
20,000.00	Walter Hastings (1888), . . . .	20,000.00
100,000.00	Henry L. Higginson (1906), . .	100,000.00
5,000.00	George Baxter Hyde (1895), . .	5,000.00
4,000.00	Insurance and Guaranty (1860), .	4,000.00
16,871.63	Leonard Jarvis (1859), . . . .	16,871.63
10,000.00	Henry P. Kidder (1894), . . . .	10,000.00
10,000.00	Joseph Lee (1802), . . . . .	10,000.00
10,000.00	Theodore Lyman (1898), . . . .	10,000.00
15,750.00	Israel Munson (1844), . . . . .	15,750.00
49,980.00	Henry S. Nourse (1904), . . . .	50,000.00
113,817.44	Francis E. Parker (1886), . . .	113,817.44
4,005.59	George F. Parkman (1909), . . .	4,005.59
30,000.00	William Perkins (1888), . . . .	30,000.00
50,000.00	Henry L. Pierce (1898), . . . .	50,000.00
157,198.14	Henry L. Pierce (Residuary) (1898),	157,198.14
64,334.47	President's (1883), . . . . .	64,425.24
371,957.48	Retiring Allowance (1879), . . . .	378,159.96
11,000.00	Riverside (1903), . . . . .	11,000.00
\$1,945,616.04	. . Amounts carried forward, . . .	\$1,927,989.55



<u>Principal, July 1, 1911.</u>		<u>Principal, June 30, 1912.</u>
\$9,051,048.48	. . Amounts brought forward, . . .	\$448,150.21 \$8,910,809.63
43,717.22	Joseph Eveleth (1896), . . . .	44,481.23
2,590.71	Fall River (1898), . . . . .	2,618.96
6,668.75	Farrar (1873), . . . . .	6,723.87
5,041.32	George Fisher and Elizabeth Huntington Fisher (1908), . .	5,090.75
12,109.52	Richard Augustine Gambrill (1890), . . . . .	12,183.97
8,115.72	Charles Haven Goodwin (1889),	8,167.47
4,751.83	Greene (1863), . . . . .	4,787.05
100.00	Price Greenleaf (balance), . . .	290.00
5,066.44	Selwyn L. Harding Scholarship of the Class of 1886 (1911), . .	5,092.21
1,048.50	Harvard Club of Boston, . . . .	1,048.50
.....	" " Kansas City, . . .	150.00
100.00	" " Lawrence, . . . .	.....
200.00	" " Rochester, N. Y., .	200.00
50.00	" " San Francisco, . .	50.00
329.24	" " Washington, D. C. (balance), . . . . .	79.24
10,718.00	John Appleton Haven (1902), .	10,773.54
25,794.78	William Hilton (1897), . . . .	26,171.64
11,406.33	Ebenezer Rockwood Hoar (1895), . . . . .	11,470.98
6,728.08	Levina Hoar, for the town of Lin- coln, Mass. (1876), . . . . .	6,761.12
13,874.56	Hodges (1878), . . . . .	13,906.07
6,683.48	Hollis (1722), . . . . .	6,739.29
11,323.52	Henry B. Humphrey (1890), . .	11,384.05
32,676.20	Charles L. Jones (1901), . . . .	32,943.66
11,120.63	George Emerson Lowell (1886),	11,221.12
5,801.37	Markoe (1903), . . . . .	5,838.52
3,355.26	Matthews (balance), . . . . .	1,663.31
6,631.57	Merrick (1888), . . . . .	6,684.85
8,847.40	Morey (1868), . . . . .	8,910.33
6,199.50	Lady Mowison (1648), . . . .	6,256.40
3,085.60	Boston Newsboys' (1906), . . . .	3,113.36
6,034.12	Howard Gardner Nichols (1897),	6,082.80
6,862.13	Lucy Osgood (1878), . . . . .	6,402.05
1,308.96	George Herbert Palmer (1911),	1,593.79
5,460.06	George Foster Peabody (1902),	5,242.73
4,609.36	James Mills Peirce Scholarship (1908), . . . . .	4,837.50
8,144.87	Pennoyer (1870), . . . . .	8,468.05
30,000.00	Charles Elliott Perkins Scholar- ships (1909), . . . . .	30,267.24
4,933.53	Rebecca A. Perkins (1869), . .	4,977.76
11,133.73	Philadelphia (1904), . . . . .	11,184.86
\$9,383,170.62	. . Amounts carried forward, . . .	\$776,938.43 \$8,910,809.63

<u>Principal, July 1, 1911.</u>		<u>Principal, June 30, 1912.</u>	
<b>\$9,883,170.62</b>	.. Amounts brought forward, . . .	<b>\$776,938.43</b>	<b>\$8,910,309.63</b>
1,810.83	Wendell Phillips Mem'l (1895),	1,825.47	
.....	Elnathan Pratt (1912), . . . .	4,847.96	
4,070.68	William Reed (1907), . . . . .	4,054.14	
350.00	Ricardo Prize (balance), . . . . .	350.00	
1,612.17	Rodger (1888), . . . . .	1,691.96	
3,673.51	Henry Bromfield Rogers (1859),	3,705.37	
11,176.09	Nathaniel Ropes, Jr., Scholarship (1909), . . . . .	11,254.31	
15,573.41	James Augustus Rumrill (1909),	15,669.27	
6,103.85	Edward Russell (1877), . . . . .	6,155.99	
6,047.26	Sales (1893), . . . . .	6,096.59	
11,898.79	Saltonstall (1789), . . . . .	11,957.54	
9,070.36	Leverett Saltonstall (1895), . .	9,119.33	
7,294.56	Mary Saltonstall (1730), . . . .	7,355.66	
3,291.31	Sever (1868), . . . . .	3,304.22	
11,855.08	Sewall (1896), . . . . .	11,941.91	
51,366.99	Shattuck (1854), . . . . .	51,809.65	
6,342.31	Slade (1877), . . . . .	6,381.24	
4,700.00	Dunlap Smith (1903), . . . . .	4,700.00	
4,785.32	Story (1864), . . . . .	4,822.18	
3,598.56	Stoughton (1701), . . . . .	3,533.79	
4,685.01	Swift (1899), . . . . .	4,716.92	
85,231.59	Thayer (1857), . . . . .	85,950.57	
4,571.85	Gorham Thomas (1865), . . . . .	4,598.16	
8,147.59	Toppan (1868), . . . . .	7,850.92	
27,403.94	Townsend (1861), . . . . .	27,760.43	
.....	University (gift), . . . . .	150.00	
4,919.10	Ira D. Van Duzee (1911), . . .	4,917.41	
5,411.73	Walcott (1855), . . . . .	5,479.62	
11,269.61	Christopher M. Weld (1899), . .	11,327.48	
5,732.55	Jacob Wendell (1899), . . . . .	5,766.33	
12,488.15	Whiting (1874), . . . . .	12,556.31	
5,000.00	Josiah Dwight Whitney (1904),	5,005.00	
11,912.29	Mary L. Whitney (1903), . . .	12,001.93	
10,620.57	Willard (1907), . . . . .	10,671.31	
2,177.09	Augustus Woodbury Scholar- ship (1909), . . . . .	2,284.85	
10,560.21	Charles Wyman (1905), . . . .	10,632.93	1,159,185.18
<b>BENEFICIARY AND LOAN</b>			
54,515.02	Rebecca C. Ames (1903), . . .	\$34,878.52	
650.00	Anonymous Gift for certain members of the Class of 1915, . . . . .	32.18	
770.75	Nathaniel Appleton (1772), . .	770.75	
2,371.56	Frank Bolles Memorial (1894), .	2,294.02	
1,915.49	William Brattle (1717), . . . .	1,915.49	
95,274.52	Daniel A. Buckley (1905), . . .	97,100.04	
<b>\$9,918,810.27</b>	.. Amounts carried forward, . . .	<b>\$156,991.00</b>	<b>\$10,069,494.81</b>

Principal, July 1, 1911.		Principal, June 30, 1912.	
\$9,918,810.87	.. Amounts brought forward, . .	\$156,991.00	\$10,069,494.81
51,782.94	Walter Channing Cabot (1905),	52,293.72	
1,858.68	Thomas Danforth (1724), . . .	1,858.68	
5,473.64	Moses Day (1880), . . . . .	5,473.64	
.....	Dean's Loan, Harvard College, . . .	500.00	
548.26	John Ellery (1738), . . . . .	548.26	
1,353.69	Exhibitions (1796), . . . . .	1,353.69	
1,074.91	Fines Loan (balance), . . . . .	2,375.67	
997.90	Thomas Fitch (1737), . . . . .	1,047.30	
592.66	Ephraim Flynt (1723), . . . . .	592.66	
218.41	Henry Flynt (1760), . . . . .	213.41	
3,166.15	Freshman Loan (balance), . . . . .	2,707.87	
1,038.54	Freshman Loan, Gove Gift, . . . .	1,059.30	
616.92	Henry Gibbs (1722), . . . . .	616.92	
4,235.72	John Glover (1653), . . . . .	4,268.33	
16,685.29	Price Greenleaf Aid (balance), .	19,813.68	
751.90	Student Fund of the Harvard Engi- neering Society of New York (1908) (balance), . . . . .	739.12	
11,904.74	Edwin A. W. Harlow (1905), . .	12,239.04	
5,615.26	Robert Henry Harlow (1908),	5,677.86	
459.99	Edward Holyoke (1743), . . . .	460.91	
2,960.89	Robert Keayne (1659), . . . . .	2,960.89	
26,261.00	Bertram Kimball (1903), . . . .	26,299.92	
1,877.61	Harry Milton Levy Loan (Col- lege) (balance), . . . . .	1,530.56	
1,279.33	Mary Lindall (1812), . . . . .	1,279.33	
5,988.87	Susan B. Lyman (1899), . . . . .	5,988.87	
545.70	Susan B. Lyman Loans (College) (balance), . . . . .	504.09	
298.82	Anne Mills (1725), . . . . .	298.82	
50.00	John F. Moors' Gift, Special aid for a member of the Class of 1915,	.....	
10,858.92	Munroe (1880), . . . . .	11,031.98	
2,184.88	Palfrey Exhibition (1821), . . . .	2,298.04	
5,492.16	Dr. Andrew P. Peabody Memo- rial (1896), . . . . .	5,591.26	
1,844.89	Scholarship and Beneficiary Money Returned (balance), . . . . .	1,123.68	
284.62	Joseph Sewall (1765), . . . . .	298.72	
16,685.69	Alexander Wheelock Thayer (1899), . . . . .	16,685.69	
11,171.94	Quincy Tufts (1877), . . . . .	11,171.94	
384.30	Benjamin Wadsworth (1737),	384.30	
.....	Waite Memorial (1912), . . . . .	50,696.52	
7,739.69	Stuart Wadsworth Wheeler (1898), . . . . .	8,259.82	416,730.49
\$10,116,980.18	.. Amounts carried forward, . . . . .	\$10,486,225.80	

# FUNDS AND GIFTS

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Principal, July 1, 1911.		Principal, June 30, 1912.
\$10,116,980.18	.. Amounts brought forward, . . . . .	\$10,486,225.80

## PRIZE

2,026.85	James Gordon Bennett (1893), .	\$2,087.19	
487.37	Philo Sherman Bennett (1905),	459.01	
10,500.00	Francis Boott (1904), . . . . .	10,600.00	
32,298.55	Bowdoin Prizes for Dissertations (1791), . . . . .	32,612.82	
2,675.07	Boylston Prizes for Elocution (1817),	2,597.49	
5,853.61	Coolidge Debating (1899), . . . .	5,924.35	
50.00	Dante Prize (balance), . . . . .	50.00	
2,786.93	Lloyd McKim Garrison Prize and Medal (1904), . . . . .	2,760.66	
8.24	Harvard Club of New Jersey Prizes (balance), . . . . .	8.24	
2,308.65	Edward Hopkins Gift for "De- turs" (1718) (balance), . . . . .	2,527.46	
1,145.83	George Arthur Knight (1909),	1,202.56	
.....	Lake Mohonk (1912), . . . . .	100.00	
.....	Old Testament Study (1912), . . .	50.00	
.....	Patria Society Gift, . . . . .	50.00	
1,185.20	Sales (1892), . . . . .	1,198.86	
2,758.78	John O. Sargent (1889), . . . .	2,795.35	
7,000.00	George B. Schier (1890), . . . .	7,000.00	
4,859.33	Charles Sumner (1874), . . . .	4,575.10	
4,181.95	Robert N. Toppan (1894), . . . .	4,186.48	
2,404.57	Philip Washburn (1899), . . . .	2,448.62	
116,832.76	David A. Wells (1901), . . . .	113,795.69	
2,026.04	Elizabeth Wilder (1911), . . . .	2,126.33	
816.59	Wister (1911), . . . . .	857.04	200,018.25

## SUMMER SCHOOL

10,850.00	Sayles, for Summer Course in Geology (1909), . . . . .	\$10,861.08	
.....	Gift for lectures, School of 1912, . .	50.00	10,411.08

## LIBRARY

56.35	Boott Income for Books (balance),	\$156.29	
2,127.19	Bowditch (1861), . . . . .	2,124.63	
313.08	Bright (balance), . . . . .	68.30	
1,085.34	William B. Castle (1907), . . . .	1,020.02	
888.09	Fund of the Class of 1851 (1899),	888.09	
874.55	" " " 1851 (C. F. Dunbar's Gift) (1899), . . . .	874.55	
3,588.42	Book Fund of the Class of 1881 (1906), . . . . .	3,500.00	
\$10,337,819.52	.. Amounts carried forward, . . .	\$8,631.88	\$10,696,649.63

Principal, July 1, 1911.		Principal, June 30, 1912.
\$10,387,319.52	Amounts brought forward, . . .	\$8,631.88\$10,696,649.63
27,901.88	Edwin Conant (1892), . . . . .	27,768.88
25,892.26	Constantius (1886), . . . . .	26,096.12
4,708.89	Archibald C. Coolidge and Clarence L. Hay (1910), . . .	5,420.23
12,509.20	W. Bayard Cutting, Jr. Bequest (1910), . . . . .	12,547.14
17.70	Bayard Cutting Fellowship, In- come for Books (balance), . . . .	.....
5,337.50	Denny (1875), . . . . .	5,255.02
5,572.24	Farrar (1871), . . . . .	5,253.74
.....	Price Greenleaf (balance), . . .	.33
1,590.07	Charles Gross Memorial (1910), .	1,614.58
3,180.72	Haven (1844), . . . . .	3,121.90
10,055.93	Hayes (1885), . . . . .	10,000.00
5,349.69	Hayward (1864), . . . . .	5,254.96
770.90	R. M. Hodges (balance), . . . .	809.53
2,384.62	Hollis (1774), . . . . .	2,375.10
2,140.84	Homer (1871), . . . . .	2,150.08
503.21	Jarvis (1885), . . . . .	500.62
5,329.17	Lane (1863), . . . . .	5,273.82
3,125.55	George C. Lodge and Joseph Trumbull Stickney Memorial Book Fund (1911), . . . . .	3,325.48
28,750.98	Lowell (1881), . . . . .	29,541.81
10,000.00	Francis Cabot Lowell (1911), .	10,068.83
60,000.00	Minot (1870), . . . . .	60,106.33
9,065.91	Charles Eliot Norton (1905), .	8,995.48
7,213.67	Lucy Osgood (1873), . . . . .	7,133.32
7,030.88	Mary Osgood (1860), . . . . .	6,991.07
5,950.91	Francis Parkman Memorial (1908), . . . . .	5,986.06
25,162.57	George F. Parkman (for books) (1909), . . . . .	25,007.31
.....	Charles Elliott Perkins Me- morial (1911), . . . . .	289.32
3,921.40	Sales (1892), . . . . .	3,916.67
5,489.30	Salisbury (1858), . . . . .	5,534.99
5,120.00	Stephen Salisbury (1907), . . .	5,120.00
20,882.61	Sever (1878), . . . . .	20,054.13
3,949.87	Shapleigh (1801), . . . . .	3,949.87
126.03	George B. Sohler Income for Books (balance), . . . . .	47.79
2,878.11	Strobel Memorial, Class of 1877 (1909), . . . . .	2,937.02
1,993.46	Strobel Memorial, Siam (1909), .	2,047.83
10,513.49	Subscription for Library (1859), .	10,525.01
37,438.88	Sumner (1875), . . . . .	37,372.67
\$10,698,677.46	Amounts carried forward, . . .	\$371,029.32\$10,696,649.63

Principal, July 1, 1911.		Principal, June 30, 1912.
<b>\$10,698,677.46</b>	<b>. . Amounts brought forward, . . .</b>	<b>\$371,029.32</b>
5,075.64	<b>Kenneth Matheson Taylor</b> (1899), . . . . .	5,013.32
11,925.34	<b>Daniel Treadwell (1885), . . .</b>	11,929.54
41,521.99	<b>John Harvey Treat Book Fund</b> (1911), . . . . .	41,436.06
5,208.34	<b>Ichabod Tucker (1875), . . . .</b>	5,115.86
615.08	<b>20th Mass. Regiment of Volunteer</b> <b>Infantry (1910), . . . . .</b>	645.52
142.48	<b>Wales Income for Books (balance),</b>	327.10
15,908.44	<b>Walker (1875), . . . . .</b>	15,802.60
5,250.41	<b>Ward (1858), . . . . .</b>	5,280.06
3,002.41	<b>Julian Palmer Welsh Memorial</b> (1910), . . . . .	3,008.89
20,020.88	<b>J. Huntington Wolcott (1891),</b>	20,033.71
100,000.00	<b>Eben Wright (1883), . . . . .</b>	100,000.00
4,141.87	<b>Sundry Gifts for books (balances), .</b>	679.61
.33	<b>Sundry Gifts for services (balance), .</b>	.....
2,000.00	<b>Gift for cases, . . . . .</b>	.....
58.68	<b>Duplicate Money, . . . . .</b>	65.98
137.06	<b>Fines, . . . . .</b>	8.22
218.52	<b>Gifts for Additional Service, . . . .</b>	.....
		<b>580,370.29</b>

## DIVINITY SCHOOL

71,427.02	<b>New Endowment (1879), . . . . .</b>	<b>\$71,427.02</b>
17,000.00	<b>Oliver Ames (1880), . . . . .</b>	17,000.00
525.00	<b>Hannah C. Andrews (1836), . .</b>	525.00
1,115.26	<b>Daniel Austin (1880), . . . . .</b>	1,115.26
1,000.00	<b>Adams Ayer (1869), . . . . .</b>	1,000.00
15,275.00	<b>Joseph Baker (1876), . . . . .</b>	15,275.00
252.51	<b>Beneficiary money returned (balance),</b>	265.03
4,349.69	<b>Rushton Dashwood Burr (1894),</b>	4,380.23
37,583.74	<b>Bussey Professorship (1862), . .</b>	37,583.74
2,177.95	<b>Joshua Clapp (1836), . . . . .</b>	2,177.95
3,794.32	<b>Edwin Conant (1892), . . . . .</b>	3,794.32
25,544.37	<b>Dexter Lectureship (1810), . . .</b>	25,544.37
56,703.14	<b>Frothingham Professorship (1892),</b>	57,203.14
1,050.00	<b>Abraham W. Fuller (1847), . .</b>	1,050.00
911.34	<b>Lewis Gould (1852), . . . . .</b>	911.34
979.15	<b>Louisa J. Hall (1893), . . . . .</b>	985.11
6,008.43	<b>Hancock Professorship, . . . . .</b>	6,008.43
	<b>Composed of these Funds:—</b>	
	<b>Thomas Hancock (1765),</b>	
	<b>Stephen Sewall (1762).</b>	
151,742.21	<b>Charles L. Hancock (1891), . .</b>	151,770.76
5,000.00	<b>Haven (1898), . . . . .</b>	5,000.00
1,050.00	<b>Samuel Hoar (1857), . . . . .</b>	1,050.00
<b>\$11,317,388.01</b>	<b>. . Amounts carried forward, . . .</b>	<b>\$404,066.70</b>
		<b>\$11,277,019.92</b>

Principal, July 1, 1911.		Principal, June 30, 1912.
\$1,945,616.04	. . . Amounts brought forward, . . .	\$1,927,989.55
23,370.08	John L. Russell (1889), . . . . .	23,370.03
1,852.25	Mary R. Searle (1908), . . . . .	1,852.25
46,913.18	Isaac Sweetser (1894), . . . . .	46,913.18
5,000.00	Seth Turner (1883), . . . . .	5,000.00
100,000.00	William F. Weld (1898), . . . . .	100,000.00
		\$2,105,124.96

## COLLEGE FUNDS

13,583.70	John W. P. Abbot (1874), . . .	\$14,256.10
27,748.64	Alford Professorship (1765), . . .	27,748.64
7,806.86	Daniel Austin (1879), . . . . .	7,806.86
5,787.61	William H. Baldwin, Jr. 1885 (1906), . . . . .	5,588.96
666.67	John Barnard (1777), . . . . .	666.67
30,686.85	John B. Barringer (1873), . . .	30,686.85
15,000.00	Robert Charles Billings, for Gray Herbarium (1903), . . . . .	15,000.00
1,050.00	John A. Blanchard (1873), . . .	1,050.00
39,780.00	Botanic Department (1880), . . . .	39,780.00
28,337.40	Boylston Professorship (1772), . .	28,337.40
11,224.65	Francis James Child Memorial (1897), . . . . .	11,224.65
7,179.37	Classical Publication Fund of the Class of 1856 (1888), . . . . .	7,179.37
103,669.41	Class of 1880 (1906), . . . . .	103,669.41
91,924.30	Fund of the Class of 1882 (1907), .	94,970.18
278.59	Class of 1883 Special Fund (1906), .	292.40
98,599.91	Class of 1884 (1909), . . . . .	100,099.91
108,305.99	Class of 1885 Gift (1910), . . . . .	108,305.99
100,000.00	Class of 1886 (1911), . . . . .	100,000.00
.....	Class of 1887 (1912), . . . . .	100,000.00
150,637.54	Class Subscription (1870), . . . . .	150,637.54
321,399.84	Edward W. Codman (1905), . . .	321,399.84
1,500.00	John Coggan (1652), . . . . .	1,500.00
57,521.55	T. Jefferson Coolidge, for Re- search in Physics, . . . . .	59,860.06
4,250.40	Paul Dudley (1751), . . . . .	4,260.78
111,838.81	Eaton Professorship (1908), . . .	112,374.84
21,619.50	Eliot Professorship (1814), . . .	21,619.50
10,000.00	Eliot " (Jonathan Phillips's gift) (1854), . . . . .	10,000.00
3,500.01	Erving Professorship (1791), . . .	3,500.01
35,990.99	Fisher " (1834), . . . . .	35,990.99
434.57	Henry Flynt (1760), . . . . .	435.21
16,240.38	Fund for Permanent Tutors (1796), .	16,240.38
1,033.57	Fund for Religious Services (1887), .	1,033.57
6,078.51	George A. Gardner (1892), . . .	6,130.66
\$3,556,427.07	. . . Amounts carried forward, . . .	\$1,541,646.77
		\$2,105,124.96

<u>Principal, July 1, 1911.</u>		<u>Principal, June 30, 1912.</u>	
<b>\$3,556,427.07</b>	.. Amounts brought forward, . . .	<b>\$1,541,646.77</b>	<b>\$2,105,124.96</b>
15,141.86	Godkin Lectures (1903), . . . . .	15,891.89	
7,812.77	Gospel Church (1868), . . . . .	8,006.14	
32,711.00	Asa Gray Memorial (1898), . . .	32,711.00	
21,451.25	Asa Gray Professorship of Systematic Botany (1897), . . . . .	21,451.25	
200,096.86	Gurney (1888), . . . . .	200,096.86	
5,661.71	George Silsbee and Ellen Sever Hale (1904), . . . . .	5,941.98	
.....	Harvard Foundation for Exchanges with French Universities (1912), .	30,352.98	
15,258.56	Harvard Oriental Series (1899), . .	15,486.64	
20,655.91	Herbarium (1865), . . . . .	20,655.91	
20,217.08	Hersey Professorship (1772), . . .	20,217.08	
21,744.18	Hersey Professorship (Thomas Lee's gift) (1856), . . . . .	21,744.18	
.....	Richard Hodgson Memorial (1912), . . . . .	10,012.18	
520.00	Thomas Hollis (for Treasurer) (1721), . . . . .	520.00	
3,747.38	Hollis Professorship of Mathematics, Composed of these Funds:—	3,747.38	
	Thomas Brattle (1718),		
	William Dummer (1762),		
	Daniel Henchman (1758),		
	Thomas Hollis (1726).		
1,000.00	Thomas Hubbard (1774), . . .	1,000.00	
444.44	Nathaniel Hulton (1695), . . .	444.44	
233.38	Thomas Hutchinson (1739), . .	233.33	
6,258.54	Ingersoll Lecture (1894), . . . .	6,522.62	
61,536.43	Abbott Lawrence (1859), . . .	61,536.43	
50,375.00	James Lawrence (1865), . . . .	50,375.00	
11,996.55	Lectures on Political Economy (1889),	12,315.40	
15,796.97	Lee Fund for Reading (1863), . . .	15,796.97	
110,043.29	Henry Lee Professorship (1900), .	110,043.29	
10,273.73	Solomon Lincoln Bequest (1911),	10,782.29	
7,732.50	Joseph Lovering for Physical Research (1891), . . . . .	7,747.94	
68,257.31	Lowell Fund for a Botanic Garden (1882) (formerly Professorship of Natural History, 1805), . . . . .	68,257.31	
20,212.81	Woodbury Lowery Memorial (1910), . . . . .	20,232.75	
50,000.00	Arthur T. Lyman (1904), . . .	50,000.00	
43,062.93	McLean Professorship (1834), . .	43,062.93	
.....	Music Building Maintenance Fund (1911), . . . . .	6,852.51	
1,865.41	Music Department (1903), . . . .	1,432.97	
<b>\$4,380,084.82</b>	.. Amounts carried forward, . . .	<b>\$3,415,117.87</b>	<b>\$2,105,124.96</b>



Principal, July 1, 1911.		Principal, June 30, 1912.	
<b>\$4,880,084.82</b>	. . . Amounts brought forward, . . .	<b>\$2,415,117.87</b>	<b>\$2,105,124.96</b>
333.33	John Newgate (1650), . . . . .	333.33	
26,788.88	William Belden Noble Lectures (1898), . . . . .	26,929.93	
21,914.79	Trenor L. Park Bequest (1911), . .	21,914.79	
100,396.53	Francis Greenwood Peabody Fund (1905), . . . . .	101,866.18	
14,676.38	Daniel H. Peirce (1876), . . . .	14,749.03	
456.58	James Mills Peirce Bequest (bal.),	479.20	
21,000.00	Perkins Professorship (1841), . .	21,000.00	
31,500.00	Jonathan Phillips (1861), . . .	31,500.00	
75,000.00	Physical Laboratory Endowm't (1881),	75,000.00	
25,020.19	Plummer Foundation (1854), . .	25,020.19	
52,500.00	Pope Professorship (1868), . . .	52,500.00	
189,655.98	Sarah E. Potter Endowment Fund,	198,620.97	
238,871.83	Professorship of Hygiene (1899), . .	239,003.97	
52,340.17	" " (1902), . . .	52,391.63	
32,555.25	" " (1908), . . .	45,593.71	
.....	General Publication Fund (1912), .	2,782.39	
193,921.10	Nelson Robinson, Jr. Additional (1906), . . . . .	192,266.01	
3,535.00	Ezekiel Rogers (1701), . . . . .	3,535.00	
119,018.53	Eliza O. and Mary P. Ropes, . .	121,864.24	
56,368.73	Rumford Professorship (1819), . .	56,368.73	
1,514.00	Daniel Russell (1679), . . . . .	1,514.00	
2,000.00	John L. Russell (1889), . . . .	2,000.00	
5,779.92	George William Sawin (1890),	6,066.03	
5,000.00	Robert W. Sayles (1906), . . .	5,238.87	
33,498.99	Shaler Memorial (1907), . . . .	35,128.19	
23,139.83	Smith Professorship (1816), . . .	23,139.83	
2,500.00	William M. Spackman (1905),	2,500.00	
2,050,807.18	Teachers' Endowment (1905), . . .	2,052,650.58	
15,988.30	John E. Thayer (1885), . . . .	16,414.91	
1,287.28	Elizabeth Torrey (1896), . . .	1,155.59	
13,807.26	Henry Warren Torrey (1890), . .	14,156.47	
113,975.44	Twenty-fifth Anniversary Fund of the Class of 1881 (1906), . . . . .	114,035.44	
101,219.47	Unknown Memorial (1898), . . .	100,189.99	
50,000.00	Henry Villard (1902), . . . . .	50,000.00	
40,000.00	Wales Professorship (1908), . . .	39,540.20	
18,494.39	Samuel Ward (1680), . . . . .	19,409.79	
6,567.88	Cyrus M. Warren (1893), . . .	6,335.28	
119,528.34	Henry C. Warren (1899), . . .	119,531.46	
8,115.78	Sylvester Waterhouse (1896), . .	8,517.48	
50,000.00	Increase Sumner Wheeler (1889),	50,000.00	
97.43	Jerome Wheelock (1903), . . .	112.52	
1,420.12	Chauncey Wright (1884), . . .	1,490.41	6,367,964.21
<b>\$8,800,629.59</b>	. . . Amounts carried forward, . . .	<b>\$8,473,089.17</b>	

Principal,  
July 1, 1911.

Principal, June 30, 1912.

\$8,300,629.59	.. Amounts brought forward, . . . . .	\$8,478,089.17
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## GIFTS FOR SPECIAL USE (BALANCES)

648.84	Anonymous Gift for Fellowship in Physical Research, . . . . .	\$148.84
.....	Anonymous Gift to be added to the 1912-13 income of the W. Bayard Cutting Fellowship in Physics, . .	500.00
400.00	Anonymous Gift for Salary, 1911-12, . . . . .	.....
270.00	Anonymous Gift for Special Aid, . . . . .	270.00
1,251.88	Bermuda Biological Station, . . . . .	1,240.80
760.48	Cases, etc., at the Botanic Garden, . . . . .	775.69
30.27	F. P. Bonney Gift, . . . . .	30.27
8.60	Common Room in Conant Hall, . . . . .	8.60
.....	Harvard Economic Studies, . . . . .	2,576.52
1,550.00	Department of English—Gift for Publications, . . . . .	2,498.00
578.71	Gift Department Economics, . . . . .	.....
.....	Department Economics, Special Use, . . . . .	75.00
78.08	Experimental Phonetics, . . . . .	78.08
.....	Gift Department of Fine Arts, . . . . .	15.00
70.04	French Department Library, . . . . .	70.04
14.50	Geographical Department, Lantern Slides, . . . . .	14.50
54.69	Department of Geology, Exhibition Case for Photographs, . . . . .	.....
322.52	Collections for a Germanic Museum, . . . . .	322.52
476.80	Department of Government—F. G. Thomson Gift, . . . . .	1,568.69
.....	Department of Government—Gift David A. Ellis, Books, . . . . .	9.14
.....	Department of Government—Gift for special expenses in Municipal Government, . . . . .	108.30
86.15	Augustus Hemenway Gift, . . . . .	86.15
1,029.91	History Book Fund, . . . . .	1,846.62
850.00	Gift for Apparatus for Professor Jeffrey's Courses, . . . . .	.....
20.00	Gift for Land in New Hampshire, . . . . .	20.00
10.23	Lowell Memorial Library, . . . . .	10.23
47.62	Edward Mallinckrodt Gift, . . . . .	33.21
30.00	Department of Mathematics, . . . . .	30.00
100.00	International Committee on Teaching Mathematics, . . . . .	.....
490.47	Mathematics Book Fund, . . . . .	516.61
100.00	Sir John Murray Gift, . . . . .	100.00
74.16	Department Music, Gift, . . . . .	50.87
\$8,309,483.54	.. Amounts carried forward, . . . . .	\$12,548.18 \$8,478,089.17

Principal, July 1, 1911.		Principal, June 30, 1912.
\$8,809,488.54	.. Amounts brought forward, . . .	\$12,548.18 \$8,473,089.17
59.05	Philosophical Library, . . . . .	180.67
8,808.67	Plantation of Shrubs, etc., . . . . .	.....
14.65	Harvard Psychological Review, . . .	21.61
25.00	Political Economy Department, Li- brary, . . . . .	25.00
6,089.12	Decorating the front of the Nelson Robinson Jr. Hall, . . . . .	6,280.68
.....	Gift for salaries, 1912-13, . . . . .	2,000.00
2,866.98	Sanskrit Department, . . . . .	2,473.54
1,002.05	Semitic Library, . . . . .	879.82
4,818.38	Social Ethics, . . . . .	4,645.82
800.00	Social Ethics Library, . . . . .	298.10
644.78	Furnishings for the Department of Social Ethics, . . . . .	450.27
801.48	Sugar-cane investigation, etc., . . .	817.45
		30,616.14

## FELLOWSHIP

25,505.20	Bayard Cutting (1910), . . . . .	\$25,642.69
12,920.20	W. Bayard Cutting, Jr. Bequest (1910), . . . . .	12,984.74
5,876.78	George W. Dillaway (1903), . . .	5,942.69
26.17	Fellowship in Central American Arch- aeology (balance), . . . . .	26.17
11,896.12	Ozias Goodwin Memorial (1889), . . .	11,959.97
11,808.77	Harris (1868), . . . . .	11,398.31
26,448.98	Edward William Hooper (1905), . . .	26,608.21
11,468.71	John Thornton Kirkland (1871), . . .	11,531.17
12,841.80	Henry Lee Memorial (1889), . . .	12,427.78
.....	Elkan Naumburg (1911), . . . . .	10,281.31
19,166.40	Charles Eliot Norton (1901), . . .	19,169.67
5.48	John Knowles Paine (1912), . . .	28,384.07
13,565.97	Robert Treat Paine (1887), . . .	13,637.48
62,892.82	John Parker (1873), . . . . .	68,881.08
10,506.15	Francis Parkman (1906), . . . . .	10,426.20
10,244.70	Princeton (1910), . . . . .	10,801.82
38,576.90	Rogers (1869), . . . . .	38,738.96
12,893.47	Henry Bromfield Rogers Memo- rial (1889), . . . . .	12,796.77
.....	Henry Russell Shaw (1912), . . .	35,264.83
524.25	Social Ethics, . . . . .	100.18
100.00	South End House (balance), . . . . .	.....
12,815.08	John Tyndall (1885), . . . . .	12,899.43
11,808.26	James Walker (1881), . . . . .	11,867.76
25,477.08	Whiting (1896), . . . . .	25,838.13
		406,604.32
\$8,660,967.84	.. Amounts carried forward, . . . . .	\$8,910,309.63

FUNDS AND GIFTS

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Principal, July 1, 1911.		Principal, June 30, 1912.
\$8,660,967.84	. . . Amounts brought forward, . . .	\$8,910,809.68

SCHOLARSHIP

3,974.74	Abbot (1852), . . . . .	\$3,996.51
2,870.01	Alford (1785), . . . . .	3,012.08
.....	Scholarship at International School of American Archaeology and Eth- nology at Mexico City (gift), . .	600.00
6,072.75	Caroline M. Barnard Bequest (1911), . . . . .	29,972.75
5,441.08	Bartlett (1881), . . . . .	5,460.41
5,808.83	Bassett (1876), . . . . .	5,826.38
13,927.88	Bigelow (1865), . . . . .	14,017.32
9.70	Charles Sumner Bird, . . . . .	.....
3,584.68	Samuel A. Borden (1896), . . .	3,762.14
116,759.02	Bowditch (1864), . . . . .	117,988.59
4,611.32	Bright (balance), . . . . .	4,826.96
4,065.41	Browne (1887), . . . . .	4,091.62
5,662.86	Morey Willard Buckminster (1898), . . . . .	5,693.18
35,889.00	Burr (1895), . . . . .	36,065.51
6,332.04	Ruluff Sterling Choate (1884),	6,370.47
10,154.79	George Newhall Clark (1908),	10,162.47
5,066.45	Thomas William Clarke (1911),	5,092.22
8,829.02	Class of 1802 (1870), . . . . .	8,891.06
3,391.02	" 1814 (1853), . . . . .	3,408.87
7,005.69	" 1815 (Kirkland) (1852),	7,052.49
4,891.49	" 1817 (1852), . . . . .	4,933.59
3,547.91	" 1828 (1882), . . . . .	3,523.54
5,370.66	" 1835 (1853), . . . . .	5,411.52
5,469.06	" 1841 (1871), . . . . .	5,514.78
5,467.56	" 1852 (Dana) (1876), . .	5,513.23
16,920.85	" 1856 (1885), . . . . .	17,008.43
7,311.63	" 1867 (1886), . . . . .	7,348.57
5,412.56	" 1877 (1902), . . . . .	5,455.50
6,891.08	" 1883 (1900), . . . . .	6,432.43
150.00	Classical Department (Gift), . . . .	157.42
.....	Clement Harlow Condell (1911),	25,000.00
12,801.24	Crowninshield (1877), . . . . .	12,884.88
6,000.00	Warren H. Cudworth, . . . . .	6,000.00
6,619.36	Francis H. Cummings (1898), .	6,672.00
5,680.11	George and Martha Derby (1881),	5,711.27
6,558.53	Julius Dexter (1892), . . . . .	6,658.20
3,096.63	Orlando W. Doe (1893), . . . .	3,149.93
250.00	Edda Club (1911), . . . . .	508.21
5,764.88	William Samuel Eliot (1875), .	5,800.24
32,920.85	George H. Emerson (1903), . .	33,875.44
\$9,051,048.43	. . . Amounts carried forward, . . .	\$443,150.21 \$8,910,809.68

Principal, July 1, 1911.		Principal, June 30, 1912.	
\$9,051,048.48	. . . Amounts brought forward, . . .	\$443,150.21	\$8,910,309.63
48,717.22	Joseph Eveleth (1896), . . . .	44,481.23	
2,590.71	Fall River (1898), . . . . .	2,618.96	
6,668.75	Farrar (1878), . . . . .	6,728.87	
5,041.22	George Fisher and Elizabeth Huntington Fisher (1908), . .	5,090.75	
12,109.52	Richard Augustine Gambrill (1890), . . . . .	12,183.97	
8,115.72	Charles Haven Goodwin (1889),	8,167.47	
4,751.83	Greene (1868), . . . . .	4,787.05	
100.00	Price Greenleaf (balance), . . .	220.00	
5,066.44	Selwyn L. Harding Scholarship of the Class of 1886 (1911), . .	5,092.21	
1,048.50	Harvard Club of Boston, . . . .	1,048.50	
.....	" " Kansas City, . . .	150.00	
100.00	" " Lawrence, . . . .	.....	
200.00	" " Rochester, N. Y., .	200.00	
50.00	" " San Francisco, . .	50.00	
329.24	" " Washington, D. C. (balance), . . . . .	79.24	
10,718.00	John Appleton Haven (1902), .	10,773.54	
25,794.78	William Hilton (1897), . . . .	26,171.64	
11,406.83	Ebenezer Rockwood Hoar (1895), . . . . .	11,470.93	
6,728.08	Levina Hoar, for the town of Lin- coln, Mass. (1876), . . . . .	6,761.12	
13,874.56	Hodges (1878), . . . . .	13,906.07	
6,683.48	Hollis (1722), . . . . .	6,789.29	
11,323.52	Henry B. Humphrey (1890), . .	11,384.05	
32,676.20	Charles L. Jones (1901), . . . .	32,943.66	
11,120.68	George Emerson Lowell (1886),	11,221.12	
5,801.37	Markoe (1903), . . . . .	5,838.52	
3,355.26	Matthews (balance), . . . . .	1,663.31	
6,681.57	Merrick (1888), . . . . .	6,684.85	
8,847.40	Morey (1868), . . . . .	8,910.33	
6,199.50	Lady Mowlson (1648), . . . . .	6,256.40	
3,085.60	Boston Newsboys' (1906), . . . .	3,113.36	
6,084.12	Howard Gardner Nichols (1897),	6,082.80	
6,362.18	Lucy Osgood (1878), . . . . .	6,402.05	
1,308.96	George Herbert Palmer (1911),	1,593.79	
5,460.06	George Foster Peabody (1902),	5,242.73	
4,609.36	James Mills Peirce Scholarship (1908), . . . . .	4,837.50	
8,144.87	Pennoyer (1670), . . . . .	8,468.05	
30,000.00	Charles Elliott Perkins Scholar- ships (1909), . . . . .	30,267.24	
4,933.53	Rebecca A. Perkins (1869), . .	4,977.76	
11,133.73	Philadelphia (1904), . . . . .	11,184.86	
\$9,383,170.62	. . . Amounts carried forward, . . .	\$776,938.43	\$8,910,309.63

Principal, July 1, 1911.		Principal, June 30, 1912.	
<b>\$9,888,170.63</b>	. . Amounts brought forward, . . .	<b>\$776,988.48</b>	<b>\$8,910,309.63</b>
1,810.88	Wendell Phillips Mem'l (1895),	1,825.47	
.....	Elnathan Pratt (1912), . . . .	4,847.96	
4,070.68	William Reed (1907), . . . .	4,054.14	
850.00	Ricardo Prize (balance), . . . .	850.00	
1,612.17	Rodger (1888), . . . . .	1,691.96	
3,678.51	Henry Bromfield Rogers (1859),	3,705.87	
11,176.09	Nathaniel Ropes, Jr., Scholarship (1909), . . . . .	11,254.31	
15,578.41	James Augustus Rumrill (1909),	15,669.27	
6,103.85	Edward Russell (1877), . . . .	6,155.99	
6,047.26	Sales (1898), . . . . .	6,096.59	
11,898.79	Saltonstall (1789), . . . . .	11,957.54	
9,070.86	Leverett Saltonstall (1895), . .	9,119.38	
7,294.56	Mary Saltonstall (1730), . . . .	7,355.66	
3,291.81	Sever (1868), . . . . .	3,304.22	
11,855.08	Sewall (1696), . . . . .	11,941.91	
51,366.99	Shattuck (1854), . . . . .	51,809.65	
6,342.31	Slade (1877), . . . . .	6,381.24	
4,700.00	Dunlap Smith (1903), . . . .	4,700.00	
4,785.82	Story (1864), . . . . .	4,822.18	
3,598.56	Stoughton (1701), . . . . .	3,533.79	
4,685.01	Swift (1899), . . . . .	4,716.92	
85,281.59	Thayer (1857), . . . . .	85,950.57	
4,571.85	Gorham Thomas (1865), . . . .	4,598.16	
8,147.59	Toppan (1868), . . . . .	7,850.92	
27,403.94	Townsend (1861), . . . . .	27,760.43	
.....	University (gift), . . . . .	150.00	
4,919.10	Ira D. Van Dusee (1911), . . .	4,917.41	
5,411.78	Walcott (1855), . . . . .	5,479.62	
11,269.61	Christopher M. Weld (1899), . .	11,327.48	
5,732.55	Jacob Wendell (1899), . . . .	5,766.33	
12,488.15	Whiting (1874), . . . . .	12,556.31	
5,000.00	Josiah Dwight Whitney (1904),	5,005.00	
11,912.29	Mary L. Whitney (1903), . . . .	12,001.98	
10,620.57	Willard (1907), . . . . .	10,671.31	
2,177.09	Augustus Woodbury Scholar- ship (1909), . . . . .	2,284.85	
10,560.21	Charles Wyman (1905), . . . .	10,632.98	1,159,185.18

## BENEFICIARY AND LOAN

54,515.02	Rebecca C. Ames (1903), . . .	\$54,878.52	
650.00	Anonymous Gift for certain members of the Class of 1915, . . . . .	32.18	
770.75	Nathaniel Appleton (1772), . . .	770.75	
2,371.56	Frank Bolles Memorial (1894), . .	2,294.02	
1,915.49	William Brattle (1717), . . . .	1,915.49	
95,274.52	Daniel A. Buckley (1905), . . .	97,100.04	
<b>\$9,918,310.27</b>	. . Amounts carried forward, . . .	<b>\$156,991.00</b>	<b>\$10,069,494.81</b>

Principal, July 1, 1911.		Principal, June 30, 1912.
\$9,918,310.27	.. Amounts brought forward, . .	\$156,991.00 \$10,069,494.81
51,732.94	Walter Channing Cabot (1905),	52,293.72
1,358.68	Thomas Danforth (1724), . . .	1,358.68
5,473.64	Moses Day (1880), . . . . .	5,473.64
.....	Dean's Loan, Harvard College, . . .	500.00
548.26	John Ellery (1738), . . . . .	548.26
1,853.69	Exhibitions (1796), . . . . .	1,853.69
1,074.91	Fines Loan (balance), . . . . .	2,375.67
997.90	Thomas Fitch (1737), . . . . .	1,047.30
592.66	Ephraim Flynt (1723), . . . .	592.66
213.41	Henry Flynt (1760), . . . . .	213.41
3,166.15	Freshman Loan (balance), . . . .	2,707.87
1,038.54	Freshman Loan, Gove Gift, . . . .	1,059.30
616.92	Henry Gibbs (1722), . . . . .	616.92
4,225.72	John Glover (1653), . . . . .	4,268.33
16,635.29	Price Greenleaf Aid (balance), .	19,813.68
751.90	Student Fund of the Harvard Engi- neering Society of New York (1908) (balance), . . . . .	739.12
11,904.74	Edwin A. W. Harlow (1905), .	12,239.04
5,615.26	Robert Henry Harlow (1908),	5,677.86
459.99	Edward Holyoke (1743), . . .	460.91
2,960.89	Robert Keayne (1659), . . . .	2,960.89
26,261.00	Bertram Kimball (1903), . . .	26,299.92
1,877.61	Harry Milton Levy Loan (Col- lege) (balance), . . . . .	1,530.56
1,279.33	Mary Lindall (1812), . . . . .	1,279.33
5,988.87	Susan B. Lyman (1899), . . . .	5,988.87
545.70	Susan B. Lyman Loans (College) (balance), . . . . .	504.09
298.82	Anne Mills (1725), . . . . .	298.82
50.00	John F. Moors' Gift, Special aid for a member of the Class of 1915,	.....
10,858.92	Munroe (1880), . . . . .	11,031.98
2,184.88	Palfrey Exhibition (1821), . . . .	2,298.04
5,492.16	Dr. Andrew P. Peabody Memo- rial (1896), . . . . .	5,591.26
1,844.89	Scholarship and Beneficiary Money Returned (balance), . . . . .	1,123.68
284.62	Joseph Sewall (1765), . . . . .	298.72
16,685.69	Alexander Wheelock Thayer (1899), . . . . .	16,685.69
11,171.94	Quincy Tufts (1877), . . . . .	11,171.94
384.30	Benjamin Wadsworth (1737),	384.30
.....	Waite Memorial (1912), . . . .	50,696.52
7,739.69	Stuart Wadsworth Wheeler (1898), . . . . .	8,259.82 416,730.49
\$10,116,980.18	.. Amounts carried forward, . . . . .	\$10,486,225.30

# FUNDS AND GIFTS

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Principal, July 1, 1911.		Principal, June 30, 1912.
\$10,116,980.18	.. Amounts brought forward, . . . . .	\$10,486,225.80

## PRIZE

2,026.85	James Gordon Bennett (1893), .	\$2,087.19	
487.87	Philo Sherman Bennett (1905),	459.01	
10,500.00	Francis Boott (1904), . . . . .	10,600.00	
32,298.55	Bowdoin Prizes for Dissertations (1791), . . . . .	32,612.82	
2,675.07	Boylston Prizes for Elocution (1817),	2,597.49	
5,858.61	Coolidge Debating (1899), . . . .	5,924.35	
50.00	Dante Prize (balance), . . . . .	50.00	
2,736.93	Lloyd McKim Garrison Prize and Medal (1904), . . . . .	2,760.66	
8.24	Harvard Club of New Jersey Prizes (balance), . . . . .	8.24	
2,808.65	Edward Hopkins Gift for "De- turs" (1718) (balance), . . . . .	2,527.46	
1,145.83	George Arthur Knight (1909),	1,202.56	
.....	Lake Mohonk (1912), . . . . .	100.00	
.....	Old Testament Study (1912), . . .	50.00	
.....	Patria Society Gift, . . . . .	50.00	
1,185.20	Sales (1892), . . . . .	1,198.86	
2,758.78	John O. Sargent (1889), . . . . .	2,795.35	
7,000.00	George B. Schier (1890), . . . . .	7,000.00	
4,859.33	Charles Sumner (1874), . . . . .	4,575.10	
4,181.95	Robert N. Toppan (1894), . . . .	4,186.48	
2,404.57	Philip Washburn (1899), . . . .	2,448.62	
116,832.76	David A. Wells (1901), . . . . .	113,795.69	
2,026.04	Elizabeth Wilder (1911), . . . .	2,126.38	
816.59	Wister (1911), . . . . .	857.04	200,018.25

## SUMMER SCHOOL

10,850.00	Sayles, for Summer Course in Geology (1909), . . . . .	\$10,861.08	
.....	Gift for lectures, School of 1912, . .	50.00	10,411.08

## LIBRARY

56.35	Boott Income for Books (balance),	\$156.29	
2,127.19	Bowditch (1861), . . . . .	2,124.63	
813.08	Bright (balance), . . . . .	68.80	
1,085.84	William R. Castle (1907), . . . .	1,020.02	
888.09	Fund of the Class of 1851 (1899),	888.09	
874.55	" " " 1851 (C. F. Dunbar's Gift) (1899), . . . . .	874.55	
3,588.42	Book Fund of the Class of 1881 (1906), . . . . .	3,500.00	
\$10,337,819.52	.. Amounts carried forward, . . .	\$8,631.88	\$10,696,649.68



Principal, July 1, 1911.		Principal, June 30, 1912.
\$10,337,819.53	Amounts brought forward, . . .	\$8,631.88\$10,696,649.63
27,901.88	Edwin Conant (1892), . . . . .	27,768.38
25,892.26	Constantius (1886), . . . . .	26,096.12
4,708.89	Archibald C. Coolidge and Clarence L. Hay (1910), . . .	5,420.23
12,509.20	W. Bayard Cutting, Jr. Bequest (1910), . . . . .	12,547.14
17.70	Bayard Cutting Fellowship, In- come for Books (balance), . . . .	.....
5,337.50	Denny (1875), . . . . .	5,255.02
5,572.24	Farrar (1871), . . . . .	5,253.74
.....	Price Greenleaf (balance), . . .	.23
1,590.07	Charles Gross Memorial (1910), .	1,614.58
3,180.72	Haven (1844), . . . . .	3,121.90
10,055.93	Hayes (1885), . . . . .	10,000.00
5,349.69	Hayward (1864), . . . . .	5,254.96
770.90	R. M. Hodges (balance), . . . .	809.53
2,384.63	Hollis (1774), . . . . .	2,375.10
2,140.84	Homer (1871), . . . . .	2,150.08
508.21	Jarvis (1885), . . . . .	500.62
5,329.17	Lane (1863), . . . . .	5,273.82
3,125.55	George C. Lodge and Joseph Trumbull Stickney Memorial Book Fund (1911), . . . . .	3,325.48
28,750.98	Lowell (1881), . . . . .	29,541.81
10,000.00	Francis Cabot Lowell (1911), .	10,068.83
60,000.00	Minot (1870), . . . . .	60,106.33
9,065.91	Charles Eliot Norton (1905), .	8,995.48
7,213.67	Lucy Osgood (1873), . . . . .	7,188.32
7,080.88	Mary Osgood (1860), . . . . .	6,991.07
5,950.91	Francis Parkman Memorial (1908), . . . . .	5,986.06
25,162.57	George F. Parkman (for books) (1909), . . . . .	25,007.31
.....	Charles Elliott Perkins Me- morial (1911), . . . . .	289.32
3,921.40	Sales (1892), . . . . .	3,916.67
5,489.30	Salisbury (1858), . . . . .	5,534.99
5,120.00	Stephen Salisbury (1907), . . .	5,120.00
20,382.61	Sever (1878), . . . . .	20,054.13
3,949.87	Shapleigh (1801), . . . . .	3,949.87
126.08	George B. Sohler Income for Books (balance), . . . . .	47.79
2,878.11	Strobel Memorial, Class of 1877 (1909), . . . . .	2,937.02
1,993.46	Strobel Memorial, Siam (1909), .	2,047.83
10,513.49	Subscription for Library (1859), .	10,525.01
37,438.88	Sumner (1875), . . . . .	37,372.67
\$10,698,677.46	Amounts carried forward, . . .	\$371,029.32\$10,696,649.63

# FUNDS AND GIFTS

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Principal, July 1, 1911.		Principal, June 30, 1912.
\$10,698,677.46	. . Amounts brought forward, . . .	\$371,029.82\$10,696,649.63
5,075.64	Kenneth Matheson Taylor (1899), . . . . .	5,013.82
11,925.34	Daniel Treadwell (1885), . . .	11,929.54
41,521.99	John Harvey Treat Book Fund (1911), . . . . .	41,436.06
5,208.34	Ichabod Tucker (1875), . . . .	5,115.86
615.08	20th Mass. Regiment of Volunteer Infantry (1910), . . . . .	645.52
142.43	Wales Income for Books (balance),	327.10
15,903.44	Walker (1875), . . . . .	15,802.60
5,250.41	Ward (1858), . . . . .	5,280.06
3,002.41	Julian Palmer Welsh Memorial (1910), . . . . .	3,008.89
20,020.38	J. Huntington Wolcott (1891),	20,033.71
100,000.00	Eben Wright (1883), . . . . .	100,000.00
4,141.37	Sundry Gifts for books (balances), .	679.61
.33	Sundry Gifts for services (balance), .	.....
2,000.00	Gift for cases, . . . . .	.....
58.68	Duplicate Money, . . . . .	65.98
137.06	Fines, . . . . .	3.22
218.52	Gifts for Additional Service, . . . .	.....
		580,370.29

## DIVINITY SCHOOL

71,427.02	New Endowment (1879), . . . . .	\$71,427.02
17,000.00	Oliver Ames (1880), . . . . .	17,000.00
525.00	Hannah C. Andrews (1836), . .	525.00
1,115.26	Daniel Austin (1880), . . . . .	1,115.26
1,000.00	Adams Ayer (1869), . . . . .	1,000.00
15,275.00	Joseph Baker (1876), . . . . .	15,275.00
252.51	Beneficiary money returned (balance),	265.03
4,849.69	Rushton Dashwood Burr (1894),	4,880.23
37,583.74	Bussey Professorship (1862), . .	37,583.74
2,177.95	Joshua Clapp (1836), . . . . .	2,177.95
3,794.32	Edwin Conant (1892), . . . . .	3,794.32
25,544.37	Dexter Lectureship (1810), . . .	25,544.37
56,703.14	Frothingham Professorship (1892),	57,203.14
1,050.00	Abraham W. Fuller (1847), . .	1,050.00
911.34	Lewis Gould (1852), . . . . .	911.34
979.15	Louisa J. Hall (1893), . . . . .	985.11
6,008.43	Hancock Professorship, . . . . .	6,008.43
	Composed of these Funds:—	
	Thomas Hancock (1765),	
	Stephen Sewall (1762).	
151,742.21	Charles L. Hancock (1891), . .	151,770.76
5,000.00	Haven (1898), . . . . .	5,000.00
1,050.00	Samuel Hoar (1857), . . . . .	1,050.00
\$11,317,888.01	. . Amounts carried forward, . . .	\$404,066.70\$11,277,019.92

Principal, July 1, 1911.		Principal, June 30, 1912.
\$11,817,888.01	. . Amounts brought forward, . .	\$404,066.70 \$11,277,019.92
84,517.60	Hollis Professorship of Divinity, .	84,517.60
	Composed of these Funds:—	
	William Dummer (1762),	
	Daniel Henschman (1742),	
	Thomas Hollis (1731),	
	Jonathan Mason (1798),	
	James Townsend (1738).	
10,000.00	Henry P. Kidder (1881), . . .	10,000.00
9,184.69	Henry Lienow (1841), . . . . .	9,184.69
1,050.00	Caroline Merriam (1867), . . .	1,050.00
16,015.81	Parkman Professorship (1814), .	16,015.81
716.07	John W. Quinby (1888), . . . . .	726.52
1,000.00	Abby Crocker Richmond (1881),	1,000.00
1,000.00	John L. Russell (1890), . . . . .	1,000.00
1,800.00	Horace S. Sears Gift Lectures, .	.....
10,000.00	William B. Spooner (1890), . .	10,000.00
40,000.00	Thomas Tileston of New York	
	Endowment (1879), . . . . .	40,000.00
5,350.00	Mary P. Townsend (1861), . .	5,350.00
2,100.00	Winthrop Ward (1862), . . . .	2,100.00
58,845.78	Winn Professorship (1877), . . .	59,845.78
1,038.20	Augustus Woodbury Bequest	
	(1909), . . . . .	1,038.20
		595,295.25

## SCHOLARSHIP AND BENEFICIARY

2,679.61	Robert Charles Billings Prize	
	(1904), . . . . .	\$2,712.27
13,682.00	Abner W. Buttrick (1880), . . .	13,722.26
5,880.42	Thomas Cary (1820), . . . . .	5,921.48
2,952.30	George Chapman (1834), . . . .	2,969.34
4,723.94	Joshua Clapp (1839) . . . . .	4,757.77
15,580.11	Jackson Foundation (1835), . . .	15,718.32
5,947.55	J. Henry Kendall (1863), . . . .	5,991.98
3,662.88	Nancy Kendall (1846), . . . . .	3,674.20
.....	John C. Kimball (1912), . . . .	507.43
1,058.92	William Pomroy (1835), . . . . .	1,060.42
		57,080.47

## LAW SCHOOL

10,580.88	Ames (1910), . . . . .	\$10,679.04
1,410.02	James Barr Ames Loan (1904),	450.28
4,224.37	James Barr Ames Prize (1898),	4,433.61
98,537.25	Bemis Professorship (1879), . . .	98,914.83
.....	James and Augusta Barnard	
	Law (1912), . . . . .	25,206.27
2,216.46	Gift of James Munson Barnard	
	and Augusta Barnard (balance),	2,305.10
\$11,682,442.27	. . Amounts carried forward, . .	\$141,989.13 \$11,929,345.64

Principal, July 1, 1911.		Principal, June 30, 1912.
<b>\$11,682,442.27</b>	.. Amounts brought forward, . .	<b>\$141,989.18\$11,929,845.64</b>
<b>23,979.82</b>	<b>Bussey Professorship (1862), . .</b>	<b>23,979.82</b>
<b>110,654.00</b>	<b>James C. Carter Professorship</b>	
	(1906), . . . . .	109,181.37
<b>13,772.41</b>	<b>James Coolidge Carter Loan</b>	
	(1906), . . . . .	13,929.57
<b>15,750.00</b>	<b>Dane Professorship (1829), . . . .</b>	<b>15,750.00</b>
<b>5,174.55</b>	<b>Samuel Phillips Prescott Fay,</b>	
	1798, Fund and Scholarship (1907),	5,205.37
<b>3,849.54</b>	<b>George Fisher Scholarship (1906),</b>	<b>3,890.11</b>
<b>266.51</b>	<b>Hughes Loan (1903), . . . . .</b>	<b>77.00</b>
<b>26,286.99</b>	<b>Langdell (1909), . . . . .</b>	<b>26,488.20</b>
<b>47,021.25</b>	<b>Law School Book (1882), . . . . .</b>	<b>47,021.25</b>
<b>100,000.00</b>	<b>Law School Library (1898), . . . .</b>	<b>100,000.00</b>
<b>411.71</b>	<b>Harry Milton Levy Loan (Law)</b>	
	(balance), . . . . .	267.69
<b>8,340.81</b>	<b>Royall Professorship (1781), . . .</b>	<b>8,340.81</b>
<b>1,574.69</b>	<b>Scholarship money returned (balance),</b>	<b>591.52</b>
<b>1,590.11</b>	<b>Joshua Montgomery Sears, Jr.,</b>	
	Memorial Fund for Prizes (1912),	35,090.11
<b>94,994.97</b>	<b>Weld Professorship (1882), . . .</b>	<b>94,994.97</b>
<b>250.00</b>	<b>Gift for Research Scholarship, . . .</b>	<b>626,696.92</b>

## GRADUATE SCHOOL OF APPLIED SCIENCE

<b>20,936.11</b>	<b>Julia Amory Appleton Fellow-</b>	
	ship (1906), . . . . .	<b>\$20,972.45</b>
<b>1,193.24</b>	<b>Edward Austin Loans repaid (bal.),</b>	<b>922.29</b>
<b>4,226.04</b>	<b>Priscilla Clark Hodges Scholar-</b>	
	ship (1907), . . . . .	<b>4,260.23</b>
<b>11,868.06</b>	<b>Hennen Jennings Scholarship</b>	
	(1898), . . . . .	<b>11,930.53</b>
<b>7,276.10</b>	<b>Lawrence Scientific School Loans</b>	
	repaid (balance), . . . . .	<b>7,935.64</b>
<b>200.00</b>	<b>Henry Weidemann Locke Schol-</b>	
	arship. Gift (balance), . . . . .	<b>200.00</b>
<b>738.82</b>	<b>Susan B. Lyman Loan (L. S. S.)</b>	
	(balance), . . . . .	<b>837.64</b>
<b>1,387,910.25</b>	<b>Gordon McKay Endowment</b>	
	(1909), . . . . .	<b>1,554,532.75</b>
<b>250.00</b>	<b>Edward Dyer Peters Scholarship</b>	
	(balance), . . . . .	<b>250.00</b>
<b>40,805.73</b>	<b>Professorship of Engineering (1847),</b>	<b>40,805.73</b>
<b>550,000.00</b>	<b>Nelson Robinson, Jr. (1899), .</b>	<b>555,000.00</b>
<b>25,000.00</b>	<b>Arthur Rotch (1895), . . . . .</b>	<b>25,000.00</b>
<b>60,000.00</b>	<b>Gurdon Saltonstall (1901), . .</b>	<b>60,000.00</b>
<b>11,791.87</b>	<b>Josiah Stickney (1899), . . . .</b>	<b>11,791.87</b>
<b>2,737.31</b>	<b>Ames-Butler Gifts, . . . . .</b>	<b>3,155.35</b>
<b>\$14,261,293.16</b>	.. Amounts carried forward, . .	<b>\$2,297,594.48\$12,556,042.56</b>

## FUNDS AND GIFTS

Principal, July 1, 1911.		Principal, June 30, 1912.
\$14,261,293.16	Amounts brought forward, . . .	\$2,297,594.48 \$12,556,042.56
5,856.84	Gift for Equipment, Department of Architecture, . . . . .	3,450.69
18.97	Gift for Laboratory of Metallurgical Chemistry, . . . . .	18.97
2,276.07	Nelson Robinson, Jr. Special Expense Gift, . . . . .	.....
18,112.69	Nelson Robinson, Jr. Special Gift for Salaries, . . . . .	8,537.18
809.61	Summer course Mining Camp Gift, .	825.80
349.92	Mining and Metallurgy Scholarship (gift), . . . . .	199.92 2,310,622.04

## GRADUATE SCHOOL OF BUSINESS ADMINISTRATION

.....	Edmund Cogswell Converse Professorship of Banking (1912), .	\$125,745.87	
380.00	Gifts for Loans (balance), . . . .	335.00	
.....	Gift of William Endicott, Jr., Books on Transportation, . . . .	100.00	
.....	Gift for Hodgson Prize, . . . .	75.00	
.....	" " George O. May Prizes, .	50.00	
.....	" " Courses in Printing, . . . .	1,000.00	
100.00	" of Warren D. Robbins— South American Course, . . . .	100.00	
84.10	Gift of Joseph E. Sterrett, Books on Accounting, . . . . .	96.90	127,502.77

## MUSEUM OF COMPARATIVE ZOOLOGY

99,500.00	Alexander Agassiz Bequest (1910),	\$99,500.00	
94,794.56	Alexander Agassiz Bequest for Publications (1910), . . . . .	86,086.26	
297,933.10	Agassiz Memorial (1875), . . . .	297,933.10	
.....	George R. Agassiz (1911),] . .	50,000.00	
5,945.19	Virginia Barret Gibbs Scholar- ship (1892), . . . . .	5,989.47	
50,000.00	Gray Fund for Zoological Museum (1859), . . . . .	50,000.00	
107,391.03	Sturgis Hooper (1865), . . . .	107,206.88	
7,740.66	Humboldt (1869), . . . . .	7,927.27	
5,000.00	Willard Peele Hunnewell (1901), . . . . .	5,105.49	
117,469.34	Permanent (1859), . . . . .	117,469.34	
7,594.01	Teachers' and Pupils' (1875), . .	7,594.01	
5,880.57	Maria Whitney (1907), . . . .	6,073.66	
.....	Maria Whitney and James Lyman Whitney (1912), . . .	59.61	840,945.09
\$15,083,474.32	Amounts carried forward, . . . . .	\$15,835,112.46	

<u>Principal, July 1, 1911.</u>		<u>Principal, June 30, 1912.</u>
\$15,083,474.32	.. Amounts brought forward, . . . . .	\$15,835,112.46

## GERMANIC MUSEUM

10,013.52	Germanic Museum (1909), . . . . .	\$10,013.52	
209,268.49	Germanic Museum Building (1908), .	217,589.07	
53,704.55	Germanic Museum Endowment (1909),	56,862.95	
26,335.00	Emperor William (1906), . . .	26,335.00	
1,000.00	Gift for work of art, . . . . .	1,000.00	311,300.54

PEABODY MUSEUM OF AMERICAN ARCHAEOLOGY  
AND ETHNOLOGY

13,255.97	Hemenway Fellowship (1891), .	\$13,912.14	
46,515.83	Mary Hemenway Fund for Archaeology (1910), . . . . .	46,618.37	
28,355.56	Peabody Building (1866), . . .	28,355.56	
47,335.10	Peabody Collection (1866), . . .	47,335.10	
47,335.10	Peabody Professor (1866), . . .	47,335.10	
30,165.91	Thaw Fellowship (1890), . . . .	30,180.87	
10,010.00	Henry C. Warren Exploration (1899), . . . . .	10,030.50	
5,000.00	Susan Cornelia Warren (1902),	5,000.00	
6,359.08	Robert C. Winthrop Scholar- ship (1895), . . . . .	6,173.85	
20,000.00	Huntington Frothingham Wol- cott (1891), . . . . .	20,039.40	254,930.89

## MEDICAL SCHOOL

5,924.23	Harvard Medical Alumni (1907),	\$6,729.84	
10,363.78	Anonymous Fund in the Department of Theory and Practice (1906), .	10,363.78	
11,699.40	Edward Austin (Bacteriological Laboratory) (1899), . . . . .	11,103.13	
30,271.54	Edward M. Barringer (1881),	30,271.54	
100,000.00	Robert C. Billings (1900), . .	100,000.00	
6,044.84	J. Ingersoll Bowditch (1889),	10,092.68	
1,674.85	Boylston Fund for Medical Books (1800), . . . . .	1,673.21	
.....	Brinckerhoff Fund (1911), . . .	5,145.38	
25,530.94	John B. & Buckminster Brown Endowment (1896), . . . . .	26,294.72	
76,251.06	Bullard Professorship of Neuro- pathology (1906), . . . . .	76,333.85	
102,195.86	Memorial Cancer Hospital Endow- ment (1910), . . . . .	100,876.27	
11,293.67	Memorial Cancer Hospital Main- tenance (1910), . . . . .	6,287.72	
\$16,019,378.60	.. Amounts carried forward, . . .	\$385,177.12	\$16,401,393.89

Principal, July 1, 1911.		Principal, June 30, 1912.
\$16,019,378.80	.. Amounts brought forward, ..	\$385,177.12\$16,401,393.89
.....	Memorial Cancer Hospital Proctor Maintenance (1912), . . . . .	25,000.00
92,846.07	Caroline Brewer Croft (1899),	93,368.52
15,228.34	Dr. John C. Cutter Bequest (1910), . . . . .	15,348.56
.....	Thomas Dwight Memorial (1912),	2,328.07
387,141.80	Calvin and Lucy Ellis (1899),	398,515.72
207,940.88	George Fabyan Foundation for Comparative Pathology (1906), .	210,798.75
9,824.88	George Fabyan Foundation Special (1910), . . . . .	10,639.82
52,601.61	Charles F. Farrington (1909),	52,431.31
.....	Lawrence Carteret Fenno (1911),	5,135.90
.....	Lawrence Carteret Fenno Memorial Free Bed Fund (1912), . .	5,063.55
1,836.08	Samuel E. Fitz (1884), . . . .	1,836.08
25,000.00	Rebecca A. Greene (1911), . .	53,500.00
6,202.59	F. B. Greenough (Surgical Research) (1901), . . . . .	6,509.64
106,479.25	George Higginson Professorship (1902), . . . . .	107,249.96
52,239.80	John Homans Memorial (1906),	52,239.80
.....	Franklin H. Hooper Memorial Free Bed Fund (1911), . . . .	5,247.50
69,192.65	Jackson Professorship of Clinical Medicine (1859), . . . . .	69,192.65
102,738.57	Henry Jackson Endowment (1903), . . . . .	103,111.23
179,060.17	Hamilton Kuhn Memorial (1908),	190,356.88
52,120.38	Walter Augustus Lecompte Professorship of Otology (1907),	52,229.44
2,699.77	Harriet Newell Lowell (1907),	1,901.58
2,326.60	Medical Library (1872), . . . .	2,331.28
53,125.30	William O. Moseley (1897), . .	53,254.99
38,850.00	New Subscription (1888), . . . .	38,850.00
10,020.18	Lyman Nichols (1907), . . . .	10,020.18
8,581.40	George F. Parkman (Medical) (1910), . . . . .	8,581.40
6,132.45	Gift for Pathological Laboratory, .	6,285.85
1,852.63	Repayment Pathological Laboratory,	1,406.81
.....	Clara Endicott Payson Memorial Free Bed Fund (1911), .	5,247.50
39,216.62	Henry L. Pierce (Residuary) (1898), . . . . .	39,216.62
52,895.72	Proctor (1903), . . . . .	52,410.96
1,000,000.00	John D. Rockefeller Gift (1902),	1,000,000.00
9,335.94	Dr. Ruppaner (1897), . . . .	9,335.94
\$18,604,868.23	.. Amounts carried forward, ..	\$3,069,123.61\$16,401,393.89

## FUNDS AND GIFTS

79

Principal, July 1, 1911.		Principal, June 30, 1912.
\$18,604,868.28	.. Amounts brought forward, . .	\$3,069,123.61\$16,401,898.89
6,780.59	School of Comparative Medicine (1899), . . . . .	7,063.77
35,041.87	Henry Francis Sears Fund for Pathology (1907), . . . . .	35,084.99
77,000.00	George C. Shattuck (1853), . .	77,000.00
10,857.39	James Skillen Memorial Fund (1907), . . . . .	10,857.39
117,564.21	James Stillman Professorship (1902), . . . . .	118,083.62
5,763.88	Surgical Laboratory (1897), . . . .	5,942.95
15,765.11	Mary W. Swett (1884), . . . .	15,765.11
20,000.00	Samuel W. Swett (1884), . . . .	20,000.00
2,000.00	Quincy Tufts (1879), . . . . .	2,000.00
11,254.73	Warren Fund for Anatomical Mu- seum (1848), . . . . .	11,811.86
52,292.78	Edward Wigglesworth Pro- fessorship of Dermatology (1907),	54,374.88
41,940.00	Charles Wilder (1900), . . . .	52,200.47
48,836.54	Henry Willard Williams (1893),	50,853.97
.....	Zoe D. Underhill (1912), . . . .	10,109.54
270.41	Gifts for Anatomical Research (bal.),	3.88
3,007.41	Gift for Pathological Dep't. (bal.),	2,784.21
121.20	Aesculapian Club Gift, . . . . .	121.20
3.21	Anonymous Gift for Theory and Practice, . . . . .	3.21
84.61	W. H. Walker Gift, . . . . .	80.11
46.86	Gift, Bacteriological Laboratory, .	43.46
4.87	Mary R. Bremer Gift for De- partment of Anatomy, . . . . .	4.87
322.90	William N. and Katherine E. Bullard Gift, . . . . .	272.88
200.00	Gift for a Salary, Cancer Com- mission, . . . . .	200.00
.....	Gift Equipment Laboratory Com- parative Anatomy, . . . . .	196.76
210.00	Gift for Diabetes Mellitus, . . . .	142.78
2.90	Sale of Duplicate Books, Library, .	467.57
43.80	Experiments on Animals, . . . . .	24.93
3,730.96	Gift, Investigation Infantile Paralysis,	4,666.46
328.03	Loan Fund Medical Class of 1879, .	338.03
1,688.43	Mass. Society for Promoting Agri- culture, Department of Compara- tive Pathology, . . . . .	2,879.61
13.98	G. K. Sabine Gift, . . . . .	13.98
5.37	Sears Pathological Laboratory Publi- cation Fund, . . . . .	5.37
114.22	Gifts for Department Neuropathology,	168.90
\$19,060,118.94	.. Amounts carried forward, . . .	\$3,552,140.27\$16,401,898.89



## FUNDS AND GIFTS

Principal, July 1, 1911.		Principal, June 30, 1912.
\$19,060,118.94	Amounts brought forward, . . .	\$3,552,140.37
16.05	Department of Physiology, . . . .	16.05
950.00	Gift for Recreation Grounds, . . .	646.53
.24	Anonymous Gift for Investigation of Smallpox, . . . . .	.24
.....	Gift for Surgical Library, . . . .	250.00
1,058.48	Gift for X-ray Apparatus, . . . .	1,079.64
		3,554,132.73

## FELLOWSHIP

8.32	Anonymous Gift for Teaching Fel- lowships in Histology and Embry- ology (balance), . . . . .	\$8.32	
12,984.18	Charles Follen Folsom Memo- rial (1908), . . . . .	13,101.88	
.....	William O. Moseley, Jr. (1912),	75,948.47	
5,628.74	George Cheyne Shattuck Memorial (1891), . . . . .	5,682.38	
6,089.28	Charles Eliot Ware Memorial (1891), . . . . .	6,088.21	
5,656.42	John Ware Memorial (1891), . .	5,711.40	
25,310.99	Henry P. Walcott (1910), . .	26,011.79	132,547.45

## SCHOLARSHIP

5,468.53	Lucius F. Billings (1900), . .	\$5,514.24	
6,350.90	James Jackson Cabot (1906),	6,390.37	
5,988.61	David Williams Cheever (1889),	6,035.07	
3,367.74	Cotting Gift (1900), . . . . .	3,409.45	
3,101.85	Orlando W. Doe (1893), . . .	3,155.40	
3.60	John Foster income for Medical Students (balance), . . . . .	3.60	
5,906.68	Lewis and Harriet Hayden (1894),	5,949.08	
2,026.29	William Otis Johnson (1911),	4,071.16	
6,880.77	Claudius M. Jones (1893), . .	6,971.38	
3,018.33	John R. Kissinger (1911), . .	3,167.72	
5,748.65	Alfred Hosmer Linder (1895),	5,783.23	
9,112.70	Joseph Pearson Oliver (1904),	9,163.79	
5,975.07	Charles B. Porter (1897), . . .	6,020.83	
5,476.84	Francis Skinner (1905), . . . .	5,729.21	
.....	Special Scholarship 1912-13, . . .	250.00	
5,411.26	Charles Pratt Strong (1894), .	5,454.11	
6,920.08	Isaac Sweetser (1892), . . . .	7,012.57	
5,624.86	John Thomson Taylor (1899),	5,653.31	
5,776.22	Edward Wigglesworth (1897),	5,812.18	95,546.55

## PRIZE

4,762.55	Boylston (1803), . . . . .	\$4,985.82	
9,682.81	William H. Thorndike (1895),	10,162.07	15,147.89
\$19,224,370.93	Amounts carried forward, . . . . .	\$20,198,768.51	

Principal, July 1, 1911.		Principal, June 30, 1919.
\$19,224,870.93	.. Amounts brought forward, . . . . .	\$20,198,768.51

## DENTAL SCHOOL

12,000.85	Dental School Endowment (1880), .	\$12,601.35	
.....	Dental School Endowment of the Class of 1886 (1911), . . . . .	50.00	
20.00	Dental School Endowment of the Class of 1909 (1910), . . . . .	30.00	
125.00	Dental School Research Fund, . .	113.71	
6,195.83	Harvard Dental Alumni Endow- ment (1906), . . . . .	6,810.33	
1,000.00	Harriet Newell Lowell Gift, .....		
23,000.00	Henry C. Warren Endowment (1889), . . . . .	23,000.00	
500.00	Proctor Bequest (1910), . . . .	500.00	
15.16	Gift for Surgical Instruments, . . .	15.16	
10,325.00	Joseph Warren Smith, Jr. Memorial (1909), . . . . .	10,325.00	
40.27	Gifts for X-ray Apparatus, . . . .	5.27	52,950.82

## OBSERVATORY

20,109.98	Advancement of Astronomical Sci- ence (1901), . . . . .	\$19,262.31	
20,523.50	Advancement of Astronomical Sci- ence (1902), . . . . .	20,000.00	
.....	George R. Agassiz Gift, Revis- ing Draper Catalogue, . . . . .	583.34	
5,000.00	Thomas G. Appleton (1884), .	5,000.00	
825.37	Bond Gifts (balance), . . . . .	.....	
2,500.00	J. Ingersoll Bowditch (1889), .	2,500.00	
200,000.00	Uriah A. Boyden (1887), . . .	200,000.00	
62.84	Draper Memorial (balance), . .	.....	
1,014.21	J. Rayner Edmands Bequest (1911), . . . . .	1,014.21	
2,000.00	Charlotte Harris (1877), . . .	2,000.00	
45,000.00	Haven (1898), . . . . .	45,000.00	
21,000.00	James Hayward (1866), . . .	21,000.00	
50,000.00	Observatory Endowment (1882), .	50,000.00	
50,000.00	Paine Professorship (1886), . .	50,000.00	
273,932.07	Robert Treat Paine (1886), . .	273,932.07	
110,293.88	Edward B. Phillips (1849), . .	110,293.88	
12,995.12	Josiah Quincy (1866), . . . .	13,095.62	
45,116.83	David Sears (1845), . . . . .	46,232.96	
13,380.00	Augustus Story (1871), . . . .	13,380.00	
42.35	Gift for publishing lunar photographs, .....	42.35	873,336.74
\$20,151,388.19	.. Amounts carried forward, . . . . .	\$21,125,056.07	

<u>Principal, July 1, 1911.</u>		<u>Principal, June 30, 1912.</u>
\$20,151,888.19	.. Amounts brought forward, . . . . .	\$21,125,056.07

**BUSSEY INSTITUTION**

20,658.86	Woodland Hill (1895), . . . . .	20,658.86	20,658.86
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**ARNOLD ARBORETUM**

125,840.00	Arnold Arboretum (1899), . . . . .	\$125,460.00	
162,779.20	James Arnold (1872), . . . . .	163,182.08	
42,309.99	Arboretum Construction Gifts (balance),	40,228.82	
12,500.00	Robert Charles Billings (1904),	12,500.00	
20,000.00	William L. Bradley (1897), . .	20,000.00	
2,308.06	Bussey Fund for the Arnold Arboretum (1908), . . . . .	2,308.06	
4,500.00	Massachusetts Society for Promoting Agriculture (1911), . . . . .	5,000.00	
20,000.00	Francis Skinner (1906), . . . .	20,000.00	
3,132.12	Sears Gift for Library, . . . . .	2,182.51	
.....	Bayard and Ruth S. Thayer (1911), . . . . .	15,000.00	
.....	Edward Whitney (1912), . . . .	1,000.00	
2,250.68	Gift for Expedition to China (balance),	765.22	407,626.69

**PHILLIPS BROOKS HOUSE**

10,506.66	Phillips Brooks House Endow- ment (1901), . . . . .	\$10,506.66	
11,343.64	Ralph H. Shepard (1900), . . .	11,343.64	
5,480.50	Ralph Hamilton Shepard Me- morial (1898), . . . . .	5,271.10	
7,086.59	John W. and Belinda L. Randall (1897), . . . . .	7,437.40	34,558.80

**WILLIAM HAYES FOGG ART MUSEUM**

50,000.00	William Hayes Fogg (1892), . .	\$50,029.27	
16,000.28	Gray Fund for Engravings (1858),	15,786.85	
15,016.47	William M. Prichard (1898), . .	15,595.04	
30,000.00	John Witt Randall (1892), . . .	30,074.99	
.....	Gift for Improvements, . . . . .	13,081.48	124,517.63

**STILLMAN INFIRMARY**

8,102.58	Stillman Infirmary Gift (balance),	\$8,508.67	
60,555.57	Robert Charles Billings, for Stillman Infirmary (1908), . .	60,555.57	
6,876.79	Free Bed Fund of the Class of 1868 (1898), . . . . .	6,376.79	
653.26	Free Bed Fund for Stillman Infir- mary (1900), . . . . .	653.26	
\$20,788,289.44	.. Amounts carried forward, . . .	\$76,089.29	\$21,712,418.05

## FUNDS AND GIFTS

83

Principal, July 1, 1911.		Principal, June 30, 1912.
\$20,788,289.44	Amounts brought forward, . . .	\$76,089.29 \$21,712,418.05
8,633.88	Herbert Schurz Memorial Free Bed (1903), . . . . .	8,633.88
3,204.16	Henry P. Walcott (1901), . . .	3,204.16 82,926.83

## CLASS FUNDS

1,833.70	Fund of the Class of 1834 (1887),	\$1,916.23
116.27	" " " 1842 (1908),	122.02
10,838.70	" " " 1844 (1896),	11,821.12
14,348.09	" " " 1846 (1905),	15,058.32
3,725.00	" " " 1853 (1887),	3,725.00
7,863.75	" " " 1856 (1904),	7,871.25 40,018.94

## GIFTS FOR CONSTRUCTION

10,943.85	Arnold Arboretum Building Gifts,	\$990.57
421.74	Brighton Marsh Fence (balance), . .	.....
25,749.91	Francis H. Burr Memorial, . . .	.....
.....	T. Jefferson Coolidge Gift for a Chemical Laboratory, . . . . .	50,049.20
32,587.89	Freshman Dormitories, . . . . .	385,196.00
.....	High Voltage Electrical Laboratory Building, . . . . .	11,828.33
105,852.40	Wolcott Gibbs Memorial (1909),	82,785.51
886.02	Gift for Gray Herbarium—Kidder Wing, . . . . .	223.61
10,074.80	Gray Herbarium Library, . . . . .	13,333.73
.....	Gray Herbarium, gift for George R. White Laboratories, . . . . .	16,119.00
7,975.35	Collis P. Huntington Memorial Hospital, . . . . .	17,894.56
442.43	Semitic Building (balance), . . . .	442.43
331,608.93	Amey Richmond Sheldon (1909),	348,023.58
380,821.01	George Smith Bequest (1904), .	398,991.00
12,558.27	Gift for a new University Library Building (balance), . . . . .	1,956.35
.....	Gift for Architectural Studies, New Library Building, . . . . .	434.00 1,327,767.87

## SUNDRY

476,463.28	Edward Austin (1899), . . . .	\$476,463.28
50,000.00	Bright Legacy (1880), . . . . .	50,000.00
392,710.18	Bussey Trust (1861), . . . . .	392,710.18
.....	Carnegie Foundation Retiring Allowance, . . . . .	.88
166,217.72	Calvin and Lucy Ellis Aid (1899),	172,056.69
3,171.50	John Foster (1840), . . . . .	3,328.46
\$22,841,837.77	Amounts carried forward, . .	\$1,094,558.94 \$23,163,126.69

## FUNDS AND GIFTS

Principal, July 1, 1911.		Principal, June 30, 1912.
<b>\$32,841,837.77</b>	. . Amounts brought forward, . .	<b>\$1,094,558.94</b>
794,942.67	<b>Price Greenleaf (1887), . . . .</b>	787,013.82
29,939.33	<b>Henry Harris (1883), . . . .</b>	29,939.33
1,830.56	<b>Harvard Memorial Society (1898),</b>	1,750.10
64,421.50	<b>Robert Troup Paine (1880), . .</b>	65,976.16
42,000.00	<b>James Savage (1873), . . . .</b>	42,000.00
366,425.97	<b>Frederick Sheldon (1909), . . .</b>	388,873.50
150,000.00	<b>Edward Wigglesworth Memo-</b>	
	<b>rial (1909), . . . . .</b>	150,188.44
6,084.95	<b>Gifts for Semitic Museum Collection</b>	
	<b>(balance), . . . . .</b>	3,927.88
4,268.70	<b>Gifts for Excavations in Palestine</b>	
	<b>(balance), . . . . .</b>	3,758.59
107.00	<b>Gifts for Chinese Students (balance),</b>	107.00
33.96	<b>Gifts for Cuban Teachers (balance),</b>	33.96
		<b>2,568,127.72</b>

FUNDS IN TRUST FOR PURPOSES NOT  
CONNECTED WITH THE COLLEGE

16,506.47	<b>Daniel Williams (1716), . . . .</b>	<b>\$16,551.84</b>	
4,795.66	<b>Sarah Winslow (1790), . . . .</b>	4,914.64	21,465.98
<b>\$24,328,194.54</b>			<b>\$25,752,720.39</b>

SCHEDULE 5

**GENERAL SUSPENSE**

**CREDIT BALANCES**

July 1, 1911	June 30, 1912	June 30, 1912
\$4,777.20	Cryptogamic Herbarium, . . . . .	\$5,459.56
5,778.41	Gray Herbarium, . . . . .	7,858.80
1,708.52	School for Social Workers, . . . . .	593.52
12,387.44	Graduate School of Business Administration, . . . . .	13,213.09
10,900.12	Graduate School of Applied Science.	
	Unexpended balances, . . . . .	\$5,554.79
	Reserve, . . . . .	4,936.07
.....	Summer Schools, . . . . .	1,091.27
17,413.45	Divinity School, . . . . .	10,435.90
66,151.52	Law School, . . . . .	52,729.91
18,826.43	Museum of Comparative Zoölogy, . . . . .	17,272.91
2,457.56	Peabody Museum of American Archaeology and Ethnology, . . . . .	4,357.14
1,282.06	Germanic Museum, . . . . .	1,764.66
5,338.46	Bussey Institution, . . . . .	191.84
1,681.63	Botanical Museum, . . . . .	690.34
3,366.96	Botanic Garden, . . . . .	4,438.56
292.51	Laboratory Fees, Astronomy, . . . . .	.....
110.00	" " Botany (Fernald), . . . . .	.....
105.03	" " " (Thaxter), . . . . .	193.06
251.23	" " Chemistry, . . . . .	206.28
.....	" " Forestry, . . . . .	24.40
157.70	" " Geology, . . . . .	324.34
319.96	" " Hygiene, . . . . .	542.87
53.93	" " Mining and Metallurgy, . . . . .	268.82
.....	" " Physics, . . . . .	403.94
.....	" " Zoölogy, . . . . .	53.48
571.61	Engineering Camp, Squam Lake, . . . . .	577.47
277.08	Baker Estate, . . . . .	.....
.....	Robert C. Billings (Medical) Fund, Advance interest, . . . . .	252.54
<u>\$154,158.81</u>	<u>Total — Exhibit A, . . . . .</u>	<u>\$133,435.06</u>

**SCHEDULE 6**

**GENERAL SUSPENSE**

**DEBIT BALANCES**

June 30, 1912		June 30, 1912
July 1, 1911	Advances from General Investments to :	
\$8,845.02	Adams Estate, . . . . .	\$5,007.02
4,787.50	Aids, general, . . . . .	4,356.25
54.43	Anonymous Fund, . . . . .	72.06
746.02	Anonymous Gift for Harvard Clinic, . . . . .	.....
325.00	Anonymous Gift for Research in Government, . . . . .	278.86
8.82	Baker Estate, . . . . .	.....
15,188.47	Uriah A. Boyden Fund, . . . . .	15,832.28
100.00	Business School, Gift for Prizes, . . . . .	.....
.....	Business School, Study tours, . . . . .	250.00
89,238.23	Bussey Trust (Real Estate), . . . . .	37,438.23
23.55	Francis James Child Memorial Fund, . . . . .	2.53
1,574.21	Classical Department, . . . . .	.....
436.65	Classical Library Fund, . . . . .	453.70
.....	Classical Publication Fund of the Class of 1856, . . . . .	771.90
.....	C. H. Condell Scholarship, . . . . .	63.41
.....	Book Fund of the Class of 1881, . . . . .	14.58
.....	Draper Memorial Fund, . . . . .	7.35
889.55	Warren H. Cudworth Scholarship, . . . . .	294.83
225.00	Warren Delano Scholarship, . . . . .	17.50
11,014.61	Dental School, . . . . .	14,846.66
99,066.91	Dental School Building, . . . . .	104,020.26
1,855.75	Dining Hall Committee, . . . . .	.....
.....	Gift Department of Economics, . . . . .	708.02
813.67	Estate No. 52 India St., . . . . .	.....
829.68	" 21 Wharf St., . . . . .	.....
244.54	Fogg Art Museum, . . . . .	.....
1,584.66	Department of Forestry, . . . . .	1,453.04
.....	Gerrish Block, . . . . .	2,500.00
200.00	Harvard Club of Buffalo Scholarship, . . . . .	.....
400.00	" " " Cleveland " . . . . .	150.00
8.50	" " " Fitchburg " . . . . .	8.50
.....	" " " Lawrence " . . . . .	100.00
.....	" " " Seattle " . . . . .	100.00
.....	" " " Worcester " . . . . .	100.00
980.02	Harvard Economic Studies, . . . . .	.....
.....	Gift for changes, Holworthy Hall, . . . . .	6,957.04
44.03	Jefferson Physical Laboratory, . . . . .	.....
.....	Gifts for University Library expenses, . . . . .	1,500.00
.....	MacDowell Fellowship, . . . . .	25.00
.....	Matchett Bequest, . . . . .	50.00
<b>\$188,984.82</b>	<b>.. Amounts carried forward, . . . . .</b>	<b>\$197,422.42</b>

July 1, 1911	June 30, 1912
<b>\$188,984.82</b> . . . Amounts brought forward, . . . . .	<b>\$197,428.42</b>
27,742.09 Medical School, . . . . .	31,457.56
..... Graduate School of Medicine, . . . . .	1,129.89
200.00 Menorah Society Prize, . . . . .	300.00
1,050.42 Mining and Metallurgy, . . . . .	1,050.42
350.00 New University Library Building, . . . . .	.....
51,998.26 Old Boston Music Hall Estate, . . . . .	46,798.46
17.76 Charles Elliott Perkins Scholarship Fund, . . . . .	.....
95.94 Radcliffe College, . . . . .	.....
26,702.27 Randall Hall Association, . . . . .	26,702.27
29.81 John Wirt Randall Fund, . . . . .	.....
1.25 Sayles, for Summer Course in Geology, . . . . .	.....
49.16 Mary R. Searle Fund, . . . . .	28.70
150.00 Shaw Fund, Business Research, . . . . .	196.63
10,875.94 Improvements and Additions to The Soldier's Field, . .	11,269.74
94.74 Dunlap Smith Scholarship Fund, . . . . .	94.74
..... South End House Fellowship, . . . . .	95.05
722.41 Stillman Infirmary, . . . . .	437.22
..... Charles Sumner Scholarship, . . . . .	189.80
..... Gift for changes in Thayer Hall, . . . . .	3,252.14
8,161.25 Townsend Estate, . . . . .	22,976.94
26,847.45 Webb Estate, . . . . .	25,438.45
182.09 George Wigglesworth Gift, . . . . .	.....
310.16 Huntington Frothingham Wolcott Fund, . . . . .	.....
5,902.90 Woodland Hill Fund, . . . . .	6,296.84
..... Adams Woods Fellowship, . . . . .	400.00
..... Laboratory Fees — Astronomy, . . . . .	61.17
..... " " — Botany (Osterhout), . . . . .	15.79
10.61 " " — Mineralogy, . . . . .	.....
Library Funds:	
92.75 Constantius, . . . . .	.....
..... Denny, . . . . .	14.86
..... Eliza Farrar, . . . . .	22.46
8.82 Price Greenleaf, . . . . .	.....
..... Horace A. Haven, . . . . .	8.44
..... Francis B. Hayes, . . . . .	34.63
67.39 Minot, . . . . .	.....
..... Sales, . . . . .	23.02
8.62 Shapleigh, . . . . .	18.92
24.80 Daniel Treadwell, . . . . .	.....
..... James Walker, . . . . .	20.28
69.84 Ward, . . . . .	.....
<b>\$350,746.55</b> . . . Total — Exhibit A, . . . . .	<b>\$375,747.79</b>



**UNIVERSITY**  
**INCOME AND EXPENDITURE**

For the year ended June 30, 1912

**INCOME**

Income of the following Funds:

Walter F. Baker, . . . . .	\$1,134.84
Band Music, . . . . .	56.58
John Barnard, . . . . .	33.02
Andrew Bigelow, . . . . .	245.03
Stanton Blake, . . . . .	247.50
Charlotte F. Blanchard, . . . . .	236.16
Samuel D. Bradford, . . . . .	259.88
James C. Carter, . . . . .	4,950.00
John W. Carter, . . . . .	223.31
Class of 1863, . . . . .	4,686.71
John Coggan, . . . . .	74.25
Edward Erwin Coolidge (part), . . . . .	38.45
Thomas Cotton, . . . . .	7.62
John Cowdin, . . . . .	1,674.84
George B. Dorr, . . . . .	2,071.70
George Draper, . . . . .	865.69
B. H. Eddy, . . . . .	1,014.51
Harvard Ellis, . . . . .	5,010.63
Richard W. Foster, . . . . .	1,035.49
John Davis Williams French, . . . . .	95.27
Gore, . . . . .	1,018.26
John C. Gray, . . . . .	446.63
Henry Harris ( $\frac{1}{2}$ income), . . . . .	741.02
Walter Hastings, . . . . .	1,197.72
Henry L. Higginson, . . . . .	2,469.25
Thomas Hollis, . . . . .	25.74
Thomas Hubbard, . . . . .	49.50
Nathaniel Hulton, . . . . .	21.98
Thomas Hutchinson, . . . . .	11.53
George Baxter Hyde, . . . . .	247.50
Professorship of Hygiene (1899) (part), . . . . .	1,000.00
Professorship of Hygiene (1902) (part), . . . . .	200.00
Leonard Jarvis, . . . . .	835.16
Henry P. Kidder, . . . . .	495.00
Joseph Lee, . . . . .	178.65
Theodore Lyman, . . . . .	495.00
Israel Munson, . . . . .	779.63
Henry S. Nourse (part), . . . . .	1,544.11
Francis E. Parker, . . . . .	2,033.33
George F. Parkman, . . . . .	198.25
William Perkins, . . . . .	1,485.00
President's, . . . . .	3,184.54
Ezekiel Rogers, . . . . .	174.98
Amount carried forward, . . . . .	<u>\$42,794.26</u>

## UNIVERSITY (CONTINUED)

## INCOME

Amount brought forward, . . . . .	\$42,794.26	
Daniel Russell, . . . . .	74.94	
John L. Russell, . . . . .	1,156.82	
Amey Richmond Sheldon, . . . . .	16,414.65	
Isaac Sweetser, . . . . .	2,322.19	
Seth Turner, . . . . .	247.50	
William F. Weld, . . . . .	1,786.47	\$64,796.88
Gift for expenses Professor at France, . . . . .		1,200.00
Care of the Sarah Winslow Fund, . . . . .	\$5.94	
Use of houses by College officers, . . . . .	1,600.00	
Use of land by Harvard Union, . . . . .	5,730.62	
Sale of University Directory, . . . . .	2,398.02	
Sale of Annual Catalogue, . . . . .	443.57	
Sale of Quinquennial Catalogue, . . . . .	119.28	
Sale of Scrap Iron, etc., . . . . .	75.00	
Sale of wood, . . . . .	15.00	
Sale of Guide Book, . . . . .	34.96	
Checks drawn by Bursar July 1, 1872 to October 15, 1909, and not presented at Bank for payment, now credited, . . . . .	239.68	10,662.07
		<u>\$76,658.90</u>

## EXPENDITURE

Board of Overseers :		
Salaries and wages, . . . . .	\$200.00	
Printing Reports of President and Treasurer, . . .	2,172.85	
Printing, . . . . .	285.90	
Stationery, postage, telephone and telegraph, . . .	63.18	
Auditing Treasurer's accounts, . . . . .	150.00	
Advertising, . . . . .	80.00	\$2,951.93
Corporation's Office :		
Fuel, rent, etc., . . . . .	\$2,556.19	
Less 80% transferred to the Treasurer's Office, .	2,044.95	511.24
President's Office :		
Salaries :		
President, . . . . .	\$6,000.00	
Comptroller, . . . . .	263.43	
Secretary to the Corporation, . . . . .	1,041.67	
Keeper of the Corporation Records, . . . . .	1,020.00	
Services and wages, . . . . .	2,356.50	
Equipment and supplies, . . . . .	507.17	
Stationery, postage, telephone and telegraph, . .	824.91	
Printing, . . . . .	186.68	
Sundries, . . . . .	26.92	
	<u>\$12,227.28</u>	
Less 90% transferred to departments in propor- tion to the number of students, . . . . .	11,003.20	
Amounts carried forward, . . . . .	\$1,224.08	\$3,463.17

## UNIVERSITY (CONTINUED)

## EXPENDITURE

Amounts brought forward, . . . . .	\$1,224.08	\$3,463.17
Additional salary of President:		
From President's Fund, . . . . .	3,093.77	
From Thomas Cotton Fund, . . . . .	7.47	4,325.32
Treasurer's Office:		
Salaries:		
Treasurer, . . . . .	\$6,000.00	
Other salaries, . . . . .	3,400.00	
Services and wages, . . . . .	2,367.44	
Office supplies and expenses, . . . . .	781.42	
Rent of Safes, . . . . .	750.00	
University charge:		
Corporation's Office, . . . . .	2,044.95	
Less transferred:	\$15,343.81	
To Departments in proportion to the income of their Funds, . . . . .	13,655.99	
The balance represents proportion on income of University Funds, . . . . .		1,687.82
Bursar's Office:		
Salaries:		
Bursar, . . . . .	\$4,500.00	
Assistant Comptroller, . . . . .	2,500.00	
Services and wages, . . . . .	11,079.95	
Office supplies and expenses, . . . . .	2,236.55	
Mercantile Agency, . . . . .	825.00	
Less transferred:	\$31,141.50	
To the College for letting College rooms, . . . . .	\$800.00	
To Departments in proportion to the Bursar's collections and payments, . . . . .	19,842.18	20,642.18
The balance represents proportion applicable to University collections and payments, . . . . .		499.37
Publication Office:		
Salary:		
Publication Agent, . . . . .	\$2,500.00	
Services and wages, . . . . .	1,600.23	
Office supplies and expenses, . . . . .	5,342.61	
Sundries, . . . . .	100.39	
	\$9,543.23	
Less charged directly to Departments, . . . . .	5,958.80	
Balance transferred to Departments in proportion to the free distribution of their publications, . . . . .	\$3,584.93	
Amount carried forward, . . . . .		\$9,975.68

## UNIVERSITY (CONTINUED)

## EXPENDITURE

Amount brought forward, . . . . .		\$9,975.68
<b>Inspector of Grounds and Buildings:</b>		
Salary:		
Inspector of Grounds and Buildings, . . . . .	\$3,805.75	
Services and wages, . . . . .	8,452.58	
Office supplies and expenses, . . . . .	752.88	
Less transferred to Departments in proportion to the floor area of buildings in the Inspector's charge, . . . . .	\$7,510.71	
	<u>7,510.71</u>	
<b>Janitor's Office:</b>		
Services and wages, . . . . .	\$2,700.00	
Office supplies and expenses, . . . . .	57.78	
	<u>\$2,757.78</u>	
Less transferred to Departments in proportion to the floor area of buildings under Janitor's supervision,	<u>2,757.78</u>	
<b>Quinquennial Catalogue:</b>		
Salaries, . . . . .	\$500.00	
Services and wages, . . . . .	1,415.25	
Office expenses and printing, . . . . .	810.26	
	<u>\$2,225.51</u>	
Less sales, . . . . .	119.28	
Amount to be apportioned to departments, . . . .	<u>\$2,106.23</u>	
Less transferred to departments in proportion to space occupied, . . . . .	1,321.61	
Amount paid by University:		
General Funds, . . . . .	\$884.62	
Amount paid by proceeds from sales, . . . . .	119.28	1,008.90
<b>Annual Catalogue:</b>		
Printing and supplies, . . . . .	\$4,880.69	
Less sales, . . . . .	448.57	
Amount to be apportioned to departments, . . . .	<u>\$3,887.12</u>	
Less transferred to departments in proportion to space occupied, . . . . .	8,181.22	
Amount paid by University:		
General Funds, . . . . .	\$705.90	
Amount paid by proceeds from sales, . . . . .	448.57	1,149.47
<b>General Expenses:</b>		
Salary Secretary Commission on Finance, . . . .	\$2,888.32	
Auto truck account, . . . . .	2,070.58	
Expenses Real Estate in Lucas St., Boston, . . . .	128.77	
Tablet Agassiz Hall, . . . . .	209.85	
Planting in rear Anti-Toxin stable Bussey Inst., . .	522.00	
University Gazette, . . . . .	\$1,717.88	
Less sales, . . . . .	200.70	1,517.18
Amounts carried forward, . . . . .	\$6,781.15	\$12,129.05

## UNIVERSITY (CONTINUED)

## EXPENDITURE

Amounts brought forward, . . . . .	\$6,781.15	\$12,129.05
<b>General Expenses (<i>continued</i>) :</b>		
Commencement Day, . . . . .	2,781.84	
Expenses of Professor at Berlin, . . . . .	1,200.00	
"          "          France, . . . . .	1,200.00	
"          "          Colorado College, . . . . .	200.00	
Expenses Exhibit Cambridge Industrial Carnival, . . . . .	101.56	
Work on pictures, . . . . .	97.76	
Dues to American Association of Universities, . . . . .	80.00	
Expenses of Delegates, . . . . .	159.95	
Sundries, . . . . .	60.38	12,612.64
<b>Alumni List and Directory :</b>		
Services and wages, . . . . .	\$1,774.30	
Office supplies and expenses, . . . . .	765.13	
	<u>\$2,539.43</u>	
Less transferred to College, . . . . .	141.41	
Amount paid from proceeds of sales, . . . . .		2,398.02
Engineer, Services and Expenses, . . . . .	\$1,888.92	
Less transferred to Departments in proportion to the floor area of buildings under Engineer's super- vision, . . . . .	1,888.92	
Labor in maintenance of grounds, . . . . .	\$18,038.07	
Less transferred to Cambridge Departments, . . . . .	10,430.45	2,607.62
<b>Watchmen :</b>		
In Yard, . . . . .	\$1,773.24	
Outside Yard, . . . . .	1,145.33	
	<u>\$2,918.57</u>	
Transferred to Departments in proportion to floor area of buildings, . . . . .	2,918.57	
<b>Medical Adviser's Office :</b>		
Salary Medical Adviser :		
From Professorship of Hygiene (1899)		
Fund, . . . . .	\$1,000.00	
From Professorship of Hygiene (1902)		
Fund, . . . . .	200.00	
From General Funds, . . . . .	2,800.00	\$4,000.00
Services and wages, . . . . .	360.00	
Office supplies and expenses, . . . . .	207.99	
Sundries, . . . . .	345.00	
	<u>\$4,912.99</u>	
Amounts carried forward, . . . . .	\$4,912.99	\$29,747.33

## UNIVERSITY (CONTINUED)

## EXPENDITURE

Amounts brought forward, . . . . .	\$4,912.99	\$29,747.38
<b>Medical Adviser's Office (<i>continued</i>) :</b>		
Less amount paid from General Funds, transferred : \$750 to the Stillman Infirmary and the remainder to Cambridge Departments in proportion to the number of students, . . . . .	3,712.99	1,200.00
<b>Purchasing Agent :</b>		
Salary and expenses, . . . . .	\$366.26	
Transferred to Departments, . . . . .	866.26	
<b>Memorial Hall and Sanders Theatre :</b>		
Repairs and equipment, . . . . .	\$570.32	
Caretaking, . . . . .	752.44	
	\$1,322.76	
Less 90% transferred to College, . . . . .	1,190.48	132.28
Repairs and equipment, general, . . . . .		289.00
Taxes, Harvard Union, . . . . .		5,074.50
<b>Students Employment Office and Appointment Office :</b>		
Salary of Secretary, . . . . .	\$1,200.00	
Services and wages, . . . . .	3,132.70	
Office supplies and expenses, . . . . .	1,122.42	
	\$5,455.12	
Transferred to College, . . . . .	5,455.12	
<b>Payments made from University income for the following accounts :</b>		
Museum of Comparative Zoölogy . . . . . Sch. 25	\$714.15	
Peabody Museum of American Archaeology and Ethnology . . . . . Sch. 26	2,040.44	
Semitic Museum . . . . . Sch. 27	1,163.11	
Germanic Museum . . . . . Sch. 28	315.26	
William Hayes Fogg Art Museum . Sch. 29	285.56	
Phillips Brooks House . . . . . Sch. 31	175.89	4,694.41
		\$41,187.52
<b>General Surplus, made up as follows :</b>		
Restricted Income unused, added to Funds and Gifts, \$16,564.02		
Surplus, carried to Schedule 10, . . . . .	18,957.36	35,521.38
		\$76,658.90

COLLEGE

(Including the Graduate School of Arts and Sciences)

INCOME AND EXPENDITURE

For the year ended June 30, 1912

INCOME

Income of Funds for Instruction and Gifts for Salaries.

Alford Professorship, . . . . .	\$1,373.57
Edward Austin (part).	
Austin Teaching Fellowships, . . . . .	12,052.61
John B. Barringer, . . . . .	1,519.01
Bemis Professorship, . . . . .	4,500.00
Boylston Professorship, . . . . .	1,402.67
Martin Brimmer, . . . . .	2,475.00
Class of 1880, . . . . .	5,131.62
Class Subscription, . . . . .	7,456.58
Eaton Professorship, . . . . .	5,536.03
Eliot Professorship, . . . . .	1,070.14
Eliot " (Jon. Phillips' Gift), . .	850.00
Calvin and Lucy Ellis Aid (part), . . . . .	4,714.71
Erving Professorship, . . . . .	173.25
Fisher " . . . . .	1,781.55
Henry Flynt, . . . . .	21.54
Fund for Permanent Tutors, . . . . .	803.88
Gospel Church ( $\frac{1}{2}$ income used), . . . . .	386.74
Gurney (part), . . . . .	9,404.80
Hersey Professorship ( $\frac{1}{2}$ income), . . . . .	600.45
Hersey Professorship (Thomas Lee's gift), .	1,076.32
Hollis " (Mathematics), . . . . .	185.48
Abbott Lawrence, . . . . .	3,046.04
James Lawrence (part), . . . . .	1,246.79
Henry Lee Professorship, . . . . .	5,447.13
Thomas Lee, for Reading, . . . . .	781.96
Arthur T. Lyman, . . . . .	2,475.00
McLean Professorship, . . . . .	2,131.62
Francis Greenwood Peabody, . . . . .	4,969.65
Daniel H. Peirce, . . . . .	726.47
Perkins Professorship, . . . . .	1,039.50
Plummer Foundation, . . . . .	1,238.49
Pope Professorship, . . . . .	2,598.75
Nelson Robinson Jr. Additional (part), . .	936.59
Eliza O. and Mary P. Ropes (part), . . .	4,500.00
Bumford Professorship, . . . . .	2,790.27
Smith Professorship, . . . . .	1,145.43
Teachers' Endowment:	
Interest, . . . . .	\$100,325.12
Gift, . . . . .	400.00
Amount carried forward, . . . . .	\$197,814.76

## COLLEGE (CONTINUED)

## INCOME

Amount brought forward, . . . . .	\$197,814.76	
<b>Income of Funds for Instruction and Gifts for Salaries</b>		
<i>(continued).</i>		
Unknown Memorial (part), . . . . .	8,210.84	
Henry Villard, . . . . .	898.24	
Henry W. Wales:		
Wales Professorship, . . . . .	1,500.00	
Henry C. Warren (part), . . . . .	4,000.00	
Sylvester Waterhouse, . . . . .	401.75	
David A. Wells (part), . . . . .	5,000.00	
Jerome Wheelock, . . . . .	5.10	
Gifts for salaries, . . . . .	9,875.00	\$222,200.19
<b>Income of Funds for General Purposes.</b>		
John W. P. Abbot (accumulating), . . . .	\$672.40	
William H. Baldwin, Jr. . . . .	99.00	
John A. Blanchard, . . . . .	51.98	
Twenty-fifth Anniversary Fund of the		
Class of 1881, . . . . .	5,644.00	
Fund of the Class of 1882, . . . . .	4,601.12	
Class of 1884, . . . . .	4,880.70	
Class of 1885, . . . . .	5,361.15	
Class of 1886, . . . . .	4,950.00	
Class of 1887, . . . . .	202.85	
Edward W. Codman, . . . . .	15,678.53	
Charles L. Hancock (part), . . . . .	3,842.26	
Trenor L. Park, . . . . .	1,084.79	
Jonathan Phillips, . . . . .	1,569.25	
William M. Spackman, . . . . .	128.75	
Gifts for General Purposes, . . . . .	449.99	49,211.77
<b>Income of Fellowship Funds and Gifts for Fellowships.</b>		
Edward Austin (part):		
Edward Austin Fellowships, . . . . .	\$2,000.00	
Bayard Cutting, . . . . .	1,262.49	
W. Bayard Cutting, Jr., Bequest (for		
Research in Physics) Interest, . . . .	\$639.54	
Gift, . . . . .	500.00	1,139.54
George W. Dillaway, . . . . .	290.91	
Fellowship at Ecole Libre des Sciences Politiques		
(gift), . . . . .	600.00	
Ozias Goodwin Memorial, . . . . .	588.85	
Harris, . . . . .	584.54	
Edward William Hooper, . . . . .	1,809.23	
John Thornton Kirkland, . . . . .	567.46	
Henry Lee Memorial, . . . . .	610.93	
Amounts carried forward, . . . . .	\$8,958.95	\$271,411.96



## COLLEGE (CONTINUED)

## INCOME

Amounts brought forward, . . . .	\$8,958.95	\$371,411.96
<b>Income of Fellowship Funds and Gifts for Fellowships</b> (continued).		
Woodbury Lowery Memorial, . . . . .	992.03	
MacDowell (gift), . . . . .	575.00	
Elkan Naumburg, . . . . .	281.81	
Charles Eliot Norton, . . . . .	803.27	
John K. Paine, Interest, . . . . .	\$371.25	
Royalties, . . . . .	7.34	378.59
Robert Treat Paine, . . . . .	671.51	
John Parker, . . . . .	3,118.21	
Francois Parkman, . . . . .	520.05	
Princeton Fellowship (part), . . . . .	57.12	
Rogers, . . . . .	1,662.06	
Henry Bromfield Rogers Memorial, . . .	628.80	
Henry Russell Shaw, . . . . .	264.83	
Frederick Sheldon (part), . . . . .	17,872.85	
South End House, Gift, . . . . .	\$278.00	
Interest, . . . . .	4.95	282.95
South End House in Social Education (gift), . .	350.00	
Fellowship Department of Social Ethics, . . .	25.93	
John Tyndall, . . . . .	634.35	
James Walker, . . . . .	584.50	
Whiting, . . . . .	1,261.10	39,412.91
<b>Income of Scholarship Funds and Gifts for Scholarships.</b>		
Abbot, . . . . .	\$196.77	
Alford (accumulating), . . . . .	142.07	
Scholarship at International School of American Archaeology and Ethnology at Mexico City (gift),	600.00	
Edward Austin (part):		
"    "    Scholarships for Teachers, .	4,000.00	
Caroline M. Barnard Bequest, . . . . .	597.72	
Bartlett, . . . . .	269.33	
Bassett, . . . . .	287.55	
Bigelow, . . . . .	689.44	
Charles Sumner Bird, . . . . .	.50	
Borden (accumulating), . . . . .	177.46	
Bowditch, . . . . .	5,779.57	
Bright Scholarships (part):		
Interest on balance, . . . . .	\$228.24	
Bright Legacy (part income), . .	1,237.50	1,465.74
Browne, . . . . .	201.21	
Morey Willard Buckminster, . . . . .	280.82	
Burr, . . . . .	1,776.51	
Amounts carried forward, . . . .	\$16,464.19	\$310,824.87

## COLLEGE (CONTINUED)

## INCOME

Amounts brought forward, . . . \$16,464.19 \$310,824.87

**Income of Scholarship Funds and Gifts for Scholarships**  
(continued).

<b>Ruluff Sterling Choate, . . . . .</b>	<b>318.43</b>
<b>George Newhall Clark, . . . . .</b>	<b>507.68</b>
<b>Thomas William Clarke, . . . . .</b>	<b>250.77</b>
<b>Class of 1802, . . . . .</b>	<b>437.04</b>
" 1814, . . . . .	167.85
" 1815 (Kirkland), . . . . .	346.80
" 1817, . . . . .	242.10
" 1828, . . . . .	175.63
" 1835, . . . . .	265.86
" 1841, . . . . .	270.72
" 1852 (Dana), . . . . .	270.67
" 1856, . . . . .	837.58
" 1867, . . . . .	361.94
" 1877, . . . . .	267.94
" 1883, . . . . .	316.35
" 1901 (gift), . . . . .	300.00
<b>Classical Department, . . . . .</b>	<b>7.42</b>
<b>Clement Harlow Condell, . . . . .</b>	<b>936.59</b>
<b>Crowninshield, . . . . .</b>	<b>638.64</b>
<b>Warren H. Cudworth, . . . . .</b>	<b>297.00</b>
<b>George and Martha Derby, . . . . .</b>	<b>281.16</b>
<b>Julius Dexter, . . . . .</b>	<b>324.67</b>
<b>Orlando W. Doe, . . . . .</b>	<b>153.30</b>
<b>Edda Club, . . . . .</b>	<b>20.69</b>
<b>William Samuel Eliot, . . . . .</b>	<b>285.86</b>
<b>George H. Emerson, . . . . .</b>	<b>1,179.59</b>
<b>Joseph Eveleth (part), . . . . .</b>	<b>1,164.01</b>
<b>Fall River, . . . . .</b>	<b>128.25</b>
<b>Farrar, . . . . .</b>	<b>330.12</b>
<b>George Fisher and Elizabeth Huntington</b>	
<b>Fisher, . . . . .</b>	<b>249.53</b>
<b>Richard Augustine Gambrill, . . . . .</b>	<b>599.45</b>
<b>Charles Haven Goodwin, . . . . .</b>	<b>401.75</b>
<b>Benjamin D. Greene, . . . . .</b>	<b>235.22</b>
<b>Price Greenleaf (part) :</b>	
<b>Price Greenleaf Scholarships, . . . . .</b>	<b>3,000.00</b>
<b>Selwyn L. Harding, . . . . .</b>	<b>250.77</b>
<b>Harvard Club of Boston (gift), . . . . .</b>	<b>1,000.00</b>
" " Buffalo " . . . . .	400.00
" " Cleveland (gift), . . . . .	650.00
" " Connecticut Valley (gift), . . . . .	200.00
" " Fitchburg (gift), . . . . .	150.00

Amounts carried forward, . . . . \$34,675.07 \$310,824.87

## COLLEGE (CONTINUED)

## INCOME

Amounts brought forward, . . . . \$34,675.07    \$310,824.87

**Income of Scholarship Funds and Gifts for Scholarships**  
(continued).

<b>Harvard Club of Hawaii</b> (gift), . . . . .	200.00
“ “ <b>Hingham</b> “ . . . . .	100.00
“ “ <b>Kansas City</b> (gift), . . . . .	150.00
“ “ <b>Louisiana</b> (gift), . . . . .	257.14
“ “ <b>Lowell</b> (gift), . . . . .	350.00
“ “ <b>Lynn</b> “ . . . . .	100.00
“ “ <b>Maine</b> “ . . . . .	150.00
“ “ <b>Nebraska</b> “ . . . . .	150.00
“ “ <b>New Jersey</b> “ . . . . .	250.00
“ “ <b>Western Pennsylvania</b> (gift), . . . . .	600.00
“ “ <b>Rhode Island</b> (gift), . . . . .	150.00
“ “ <b>Rochester, New York</b> (gift), . . . . .	200.00
“ “ <b>St. Louis</b> (gift), . . . . .	440.10
“ “ <b>San Francisco</b> (gift), . . . . .	500.00
“ “ <b>Seattle</b> (gift), . . . . .	200.00
“ “ <b>Syracuse</b> (gift), . . . . .	200.00
“ “ <b>Worcester</b> “ . . . . .	100.00
<b>John Appleton Haven</b> , . . . . .	530.54
<b>William Hilton</b> (part), . . . . .	601.86
<b>Scholarship in American History</b> (gift), . . . . .	300.00
<b>Ebenezer Rockwood Hoar</b> , . . . . .	564.60
<b>Levina Hoar</b> , for the town of Lincoln, . . . . .	333.04
<b>R. M. Hodges</b> (part):	
<b>Hodges Scholarship</b> , . . . . .	306.51
<b>Hollis</b> , . . . . .	330.81
<b>Henry B. Humphrey</b> , . . . . .	560.53
<b>Charles L. Jones</b> , . . . . .	1,617.46
<b>George Emerson Lowell</b> , . . . . .	550.49
<b>Markoe</b> , . . . . .	287.15
<b>Matthews Scholarships</b> :	
Interest on balance, . . . . .	\$166.08
<b>Matthews Hall</b> , $\frac{1}{4}$ net rents, . . . . .	2,841.97
<b>William Merrick</b> , . . . . .	328.28
<b>Morey</b> , . . . . .	487.93
<b>Lady Mowlsion</b> , . . . . .	306.90
<b>Boston Newsboys'</b> , Interest, . . . . .	\$152.76
Gift, . . . . .	25.00
<b>Howard Gardner Nichols</b> , . . . . .	177.76
<b>Lucy Osgood</b> , . . . . .	298.68
<b>George Herbert Palmer</b> , . . . . .	314.92
<b>George Foster Peabody</b> , . . . . .	70.83
<b>George Foster Peabody</b> , . . . . .	32.67
<b>James Mills Peirce</b> , . . . . .	228.14

Amounts carried forward, . . . . \$49,959.46    \$310,824.87

## COLLEGE (CONTINUED)

## INCOME

Amounts brought forward, . . . \$49,959.46    \$310,824.87

Income of Scholarship Funds and Gifts for Scholarships  
(continued).

Pennoyer, . . . . .	823.18	
Charles Eliot Perkins, . . . . .	1,185.00	
Rebecca A. Perkins, . . . . .	244.23	
Philadelphia, . . . . .	551.13	
Wendell Phillips Memorial, . . . . .	89.64	
Elinathan Pratt, . . . . .	72.96	
Ricardo Prize (gift), . . . . .	350.00	
Rodger, . . . . .	79.79	
Henry Bromfield Rogers, . . . . .	181.86	
Nathaniel Ropes Jr., . . . . .	553.22	
James A. Rumrill, . . . . .	770.86	
Edward Russell, . . . . .	302.14	
Sales, . . . . .	299.33	
Saltonstall, . . . . .	588.75	
Leverett Saltonstall, . . . . .	448.97	
Mary Saltonstall, . . . . .	361.10	
James Savage (part):		
Savage Scholarship, . . . . .	300.00	
Sever, . . . . .	162.91	
Sewall, . . . . .	586.83	
Shattuck, . . . . .	2,542.66	
Slade, . . . . .	313.93	
Dunlap Smith, . . . . .	200.00	
Story, . . . . .	236.86	
Stoughton:		
Interest, . . . . .	\$19.75	
Use of pasture, . . . . .	70.48	90.23
Swift, . . . . .		231.91
Thayer, . . . . .		4,218.98
Gorham Thomas, . . . . .		226.31
Toppan, . . . . .		403.33
Townsend, . . . . .		1,856.49
University (gift) 1912-13, . . . . .		150.00
Ira D. Van Duzee (part), . . . . .		8.31
Walcott, . . . . .		267.89
Christopher M. Weld, . . . . .		557.87
Jacob Wendell:		
Interest, . . . . .	\$288.78	
Gift, . . . . .	50.00	338.78
Whiting, . . . . .		618.16
Josiah Dwight Whitney, . . . . .		247.50
Mary L. Whitney, . . . . .		589.64
Amounts carried forward, . . . . .	\$70,005.21	\$310,824.87

## COLLEGE (CONTINUED)

## INCOME

Amounts brought forward, . . .	\$70,005.21	\$310,824.8
<b>Income of Scholarship Funds and Gifts for Scholarships</b>		
<i>(continued).</i>		
Willard, . . . . .	525.74	
Augustus Woodbury, . . . . .	107.76	
Charles Wyman, . . . . .	522.72	71,161.43
<b>Income of Beneficiary and Loan Funds and Repayments.</b>		
<b>Rebecca C. Ames:</b>		
Interest, . . . . .	\$2,698.50	
Loans repaid by Students, . . .	100.00	\$3,798.50
Anonymous gifts for benefit of certain members		
of the Class of 1915, Gifts, . .		
Interest, . . . . .	32.18	557.18
Nathaniel Appleton, . . . . .		38.16
<b>Edward Austin:</b>		
Interest, . . . . .	\$257.80	
Loans repaid by students, . . . .	106.70	\$364.00
Frank Bolles Memorial, . . . . .		112.46
William Brattle, . . . . .		94.80
Daniel A. Buckley (part), . . . . .		8,025.52
Walter Channing Cabot, . . . . .		2,560.78
Edward Erwin Coolidge (part), . . . . .		700.00
Thomas Danforth, . . . . .		67.27
Moses Day, . . . . .		270.96
Calvin and Lucy Ellis Aid (part), . . . . .		2,880.00
John Ellery, . . . . .		27.13
Exhibitions, . . . . .		67.02
<b>Fines Loan Fund:</b>		
For late registration, . . . . .	\$435.00	
For delayed payment of dues, . . .	553.75	
Loans returned, . . . . .	568.54	
Interest, . . . . .	53.22	1,605.51
Thomas Fitch, . . . . .		49.40
Ephraim Flynt, . . . . .		29.35
Henry Flynt, . . . . .		10.54
<b>Freshman Loan:</b>		
Interest, . . . . .	\$156.72	
Loans repaid, . . . . .	270.00	426.72
Freshman Loan (Gove Gift), . . . . .		20.76
Henry Gibbs, . . . . .		30.55
John Glover, . . . . .		209.19
Price Greenleaf (part), . . . . .	\$16,678.95	
<b>Price Greenleaf Aid:</b>		
Interest, . . . . .	828.44	
Price Greenleaf Aids returned, . . . . .	145.00	17,647.39
Amounts carried forward, . . . .	\$38,593.19	\$381,986.30

## COLLEGE (CONTINUED)

## INCOME

Amounts brought forward, . . . . .	\$38,598.19	\$381,986.30
<b>Income of Beneficiary and Loan Funds and Repayments</b>		
<i>(continued).</i>		
<b>Edwin A. W. Harlow :</b>		
Interest, . . . . .		589.30
<b>Robert Henry Harlow :</b>		
Interest, . . . . .	\$277.95	
Loans repaid, . . . . .	25.65	803.60
<b>Harvard Engineering Society Loan Fund :</b>		
Interest, . . . . .		37.22
<b>Edward Holyoke, . . . . .</b>		22.77
<b>Robert Keayne, . . . . .</b>		146.57
<b>Bertram Kimball, . . . . .</b>		1,299.92
<b>Harry Milton Levy Loan :</b>		
Interest, . . . . .	\$92.95	
Loans repaid, . . . . .	35.00	127.95
<b>Mary Lindall, . . . . .</b>		68.31
<b>The Loan, . . . . .</b>		7,944.00
<b>Susan B. Lyman :</b>		
Interest, . . . . .		197.64
<b>Anne Mills, . . . . .</b>		14.80
<b>Munroe :</b>		
Interest, . . . . .	\$537.52	
Loans repaid, . . . . .	105.54	643.06
<b>Palfrey Exhibition :</b>		
Interest, . . . . .	\$108.16	
Award of 1910-11 returned, . . .	80.00	188.16
<b>Dr. Andrew P. Peabody Memorial :</b>		
Interest, . . . . .		271.85
<b>Scholarship and Beneficiary Money Returned :</b>		
Gift, . . . . .	\$10.00	
Loans repaid, . . . . .	1,515.78	
Interest, . . . . .	78.01	1,603.79
<b>Joseph Sewall, . . . . .</b>		14.10
<b>Alexander W. Thayer (part), . . . . .</b>		345.95
<b>Quincy Tufts, . . . . .</b>		553.01
<b>Benjamin Wadsworth, . . . . .</b>		19.00
<b>Stuart Wadsworth Wheeler :</b>		
Interest, . . . . .	\$383.13	
Loans repaid, . . . . .	137.00	520.13
<b>Waite Memorial, . . . . .</b>		696.52
		54,195.84
<b>Income of Prize Funds, and Gifts for Prizes :</b>		
<b>Jeremy Belknap (gift), . . . . .</b>	\$50.00	
<b>James Gordon Bennett, . . . . .</b>	100.34	
Amounts carried forward, . . . . .	\$150.34	\$436,182 14

## COLLEGE (CONTINUED)

## INCOME

Amounts brought forward, . . . .	\$150.34	\$436,182.14
Income of Prize Funds, and Gifts for Prizes (continued).		
Philo Sherman Bennett, . . . . .	21.64	
Francis Boott (part), . . . . .	190.00	
Bowdoin Prizes for Dissertations, . . . . .	1,598.65	
Boylston Prizes for Elocution, . . . . .	132.42	
Coolidge Debating, . . . . .	289.77	
Dante Prize (gift), . . . . .	100.00	
Lloyd McKim Garrison, . . . . .	135.48	
Edward Hopkins Gift for "Deturs":		
Interest on balance, . . . . .	\$114.80	
From Trustees, . . . . .	233.25	347.55
George Arthur Knight, . . . . .	56.78	
Lake Mohonk (gift), . . . . .	100.00	
Old Testament Study (gifts), . . . . .	125.00	
Patria Society (gift), . . . . .	50.00	
Susan Anthony Potter Prizes (gift), . . . .	225.00	
Sales, . . . . .	58.66	
John O. Sargent, . . . . .	186.57	
George B. Sohler (part), . . . . .	250.00	
Charles Sumner, . . . . .	215.77	
Robert N. Toppan, . . . . .	204.53	
Philip Washburn, . . . . .	119.05	
Elizabeth Wilder, . . . . .	100.29	
Wister, . . . . .	40.45	4,647.90
Income of Sundry Funds for Special Purposes:		
Botanic Department (part):		
‡ for Cryptogamic Herbarium, . . .	\$492.28	
‡ for Laboratories of Botany, . . .	246.14	\$738.42
William H. Baldwin, Jr., 1885, . . . . .	286.51	
Francis Boott (part), . . . . .	339.75	
Francis James Child Memorial, . . . . .	555.64	
Classical Publication Fund of the Class of 1856:		
Interest, . . . . .	\$355.36	
Sales, . . . . .	104.26	459.62
Book Fund of the Class of 1881, . . . . .	177.61	
Class of 1883 Special, . . . . .	13.81	
Cryptogamic Herbarium, . . . . .	190.08	
George A. Gardner, . . . . .	300.91	
George Silsbee and Ellen Sever Hale, . .	280.27	
Harvard Economic Studies:		
Sales of publications, . . . . .	\$487.67	
Grant from accumulated income of		
David A. Wells Fund, . . . . .	2,637.52	3,125.19
Amounts carried forward, . . . . .	\$6,457.81	\$440,830.04

## COLLEGE (CONTINUED)

## INCOME

Amounts brought forward, . . . . .	\$6,457.81	\$440,880.04
<b>Income of Sundry Funds for Special Purposes</b>		
<i>(continued).</i>		
<b>Harvard Foundation for exchanges with French Universities, . . . . .</b>	352.98	
<b>Harvard Oriental Series:</b>		
Interest, . . . . .	755.82	
<b>History Book Fund (History 1):</b>		
Sales of publications, . . . . . \$402.56		
Interest, . . . . . 20.53	428.09	
<b>Richard Hodgson Memorial, . . . . .</b>	12.18	
<b>Solomon Lincoln Bequest, . . . . .</b>	508.56	
<b>Joseph Lovering for Physical Research, . .</b>	382.78	
<b>Mathematics Book Fund: Sales of publications,</b>	91.89	
<b>Music Building Maintenance Fund, . . . . .</b>	142.51	
<b>Music Department, . . . . .</b>	67.56	
<b>James Mills Peirce Bequest, . . . . .</b>	22.62	
<b>General Publication Fund:</b>		
Sales of publications, . . . . . \$419.95		
Interest, . . . . . 86.87	506.82	
<b>Nelson Robinson, Jr. Additional (part) gift,</b>	60.00	
<b>Robert W. Sayles, . . . . .</b>	247.50	
<b>George William Sawin, . . . . .</b>	286.11	
<b>Shaler Memorial, . . . . .</b>	1,658.20	
<b>Elizabeth Torrey, . . . . .</b>	68.71	
<b>Henry Warren Torrey:</b>		
Interest, . . . . . \$683.45		
Sales, . . . . . 265.51	948.96	
<b>Unknown Memorial (part), . . . . .</b>	1,800.00	
<b>Samuel Ward, . . . . .</b>	915.40	
<b>Cyrus M. Warren, . . . . .</b>	325.12	
<b>Henry C. Warren (part), . . . . .</b>	1,916.64	
<b>David A. Wells (part), . . . . .</b>	758.48	
<b>Chauncey Wright, . . . . .</b>	70.29	
<b>Physical Laboratory Endowment (interest), . . .</b>	3,702.50	
<b>T. Jefferson Coolidge for Research in Physics, .</b>	2,501.09	24,977.57
<b>Sundry Gifts, Fees, etc., for Special Purposes.</b>		
<b>For the Department of Classics:</b>		
Gift for Lecturers, . . . . .	\$1,000.00	
" " Harvard Studies in Classical Philology, . .	50.00	
Sales of publications, . . . . .	31.42	
<b>For the Department of Economics:</b>		
Gifts for Department, . . . . .	1,004.88	
" " " Special use, . . . . .	75.00	
" " Publishing History English Customs, . . .	200.00	
Amounts carried forward, . . . . .	\$3,861.30	\$465,807.61



## COLLEGE (CONTINUED)

## INCOME

Amounts brought forward, . . . . .	\$2,361.30	\$465,807.61
<b>Sundry Gifts, Fees, etc., for Special Purposes</b> (continued).		
For the Department of English :		
Gifts for publications, . . . . .	\$900.00	
Interest, . . . . .	43.00	943.00
For the Department of Fine Arts :		
Gift for Expenses, . . . . .		40.00
For the Department of Government :		
Gift for Research in Government, . . . . .	1,000.00	
" of David A. Ellis, books, . . . . .	25.00	
" for Special Expenses in Munic. Govt., . . . . .	108.30	
" of Frank Graham Thomson, . . . . .	5,000.00	
" " Frank Graham Thomson and Clarke Thomson, . . . . .	2,500.00	
For the Department of Music :		
Gifts for Department, . . . . .	385.00	
" " Special Salary, . . . . .	100.00	
For the Department of Philosophy :		
Gifts for Department Library, . . . . .	200.00	
Sales of Psychological Review, . . . . .	6.96	
For the Department of Physics :		
Gifts for Physical Research, . . . . .	515.00	
For the Department of Sanskrit :		
Interest, . . . . .	\$47.34	
Sales of publications, . . . . .	59.27	106.61
For the Department of Semitic :		
Gift for Library — Interest, . . . . .	19.20	
For the Department of Ethics of Social Questions :		
Anonymous Gift for Department, \$2,500.00		
Interest, . . . . .	92.14	
Sales of publication, . . . . .	200.04	2,792.18
Gift for furnishing rooms — interest, . . . . .	11.59	
For the School for Social Workers :		
Gift, . . . . .	\$500.00	
Interest, . . . . .	34.16	
Tuition fees, . . . . .	210.00	744.16
For the Department of Zoölogy :		
Gift for Bermuda Biological Station, \$500.00		
Interest, . . . . .	25.25	525.25
Gift Plantation of Shrubs — interest, . . . . .	76.06	17,459.61
Amount carried forward, . . . . .		\$483,267.23

## COLLEGE (CONTINUED)

## INCOME

Amount brought forward, . . . . .		\$488,267.22
<b>Receipts from students.</b>		
Tuition Fees — Regular Programme :		
College Regular, . . . . .	\$315,470.00	
“ Special, . . . . .	5,685.00	
Unclassified, . . . . .	11,020.00	\$332,125.00
Tuition Fees — Additional Courses :		
College Regular, . . . . .	\$31,402.02	
“ Special, . . . . .	880.00	
Unclassified, . . . . .	202.66	31,984.68
Tuition — Regular Programme :		
Graduate School of Arts and Sci- ences, . . . . .	\$52,645.00	
Radcliffe students in University courses, . . . . .	1,755.00	54,400.00
Auditors' Fees :		
College, . . . . .		35.00
Examination fees :		
Admission, . . . . .	\$9,920.00	
Condition, make-up and advanced standing, . . . . .	2,064.00	
Doctor of Philosophy, . . . . .	80.00	12,014.00
Graduation fees, . . . . .		8,680.00
Laboratory fees :		
Astronomy, . . . . .	\$1,045.00	
Botany, . . . . .	1,272.50	
Chemistry, . . . . .	15,486.41	
Geology, . . . . .	1,240.00	
Mineralogy, . . . . .	315.00	
Music, . . . . .	150.00	
Hygiene, . . . . .	2,070.00	
Physics, . . . . .	3,568.00	
Psychology, . . . . .	235.00	
Zoölogy, . . . . .	1,833.87	26,715.78
College Dormitories: Hollis, Stough- ton, Holworthy, Thayer, Weld, Wadsworth House, Walter Hastings, Perkins, and Conant, . . . . .	\$74,017.66	
Matthews Hall, . . . . .	12,057.50	
	\$86,075.16	
Less $\frac{1}{2}$ net income from Matthews Hall, credited under income of Matthews Scholarship, . . . . .	2,841.97	83,233.19
Amount collected on account of unpaid term-bills previously charged off, . . . . .	100.00	549,287.65
Amount carried forward, . . . . .		\$1,032,554.87

## COLLEGE (CONTINUED)

## EXPENDITURE

Amount brought forward, . . . . .		\$1,032,554.87
<b>Sandries :</b>		
Sale of University Hymn Book, . . . . .	156.62	
“ Manual American History, . . . . .	170.27	
“ Annals of Mathematics, . . . . .	63.21	
“ old examination papers, . . . . .	372.06	
“ other publications, . . . . .	412.32	
“ Commencement Lunch tickets, . . . . .	682.50	
“ Historical Monographs, . . . . .	2.12	
Duplicate diplomas, . . . . .	25.00	
Sale of photographs, . . . . .	29.38	
Gift for Brighton Marsh Fence credited to College Account, . . . . .	421.74	
Conscience money, . . . . .	1.00	
Royalty on Sales Agamemnon of Aeschylus, . . . . .	3.40	
Receipts at College Printing Office, . . . . .	\$41,980.83	
Less Expenses contra, . . . . .	37,381.95	4,548.38
		6,888.00
		<u>\$1,039,442.87</u>

## EXPENDITURE

## From Fellowship Funds and Gifts.

## Edward Austin:

From Income, . . . . .	\$2,000.00	
From Gift, . . . . .	400.00	\$2,400.00
Bayard Cutting Fellowship, . . . . .	1,125.00	
W. Bayard Cutting, Jr., Bequest, . . . . .	575.00	
George W. Dillaway, . . . . .	225.00	
Fellowship at École Libre des Sciences Politiques, . . . . .	600.00	
Omas Goodwin Memorial, . . . . .	525.00	
Harris, . . . . .	1,000.00	
Edward William Hooper, . . . . .	1,150.00	
John Thornton Kirkland, . . . . .	500.00	
Henry Lee Memorial, . . . . .	525.00	
Woodbury Lowery, . . . . .	972.09	
MacDowell, . . . . .	600.00	
Charles Eliot Norton, . . . . .	800.00	
Robert Treat Paine, . . . . .	600.00	
John Parker, . . . . .	2,625.00	
Francis Parkman, . . . . .	600.00	
Rogers, . . . . .	1,500.00	
Henry Bromfield Rogers Memorial, . . . . .	525.00	
Frederick Sheldon (part), . . . . .	12,150.00	
Social Ethics, . . . . .	450.00	
South End House, . . . . .	478.00	

Amount carried forward, . . . . . \$29,925.09

## COLLEGE (CONTINUED)

## EXPENDITURE

Amount brought forward, . . . .	\$29,925.09	
<b>From Fellowship Funds and Gifts (<i>continued</i>).</b>		
South End House Fellowship in Social Education,	350.00	
John Tyndall, . . . . .	550.00	
James Walker, . . . . .	525.00	
Whiting, . . . . .	900.00	
Adams Woods Fellowship, . . . . .	400.00	32,650 09
<b>From Scholarship Funds and Gifts.</b>		
Abbot, . . . . .	\$175.00	
Edward Austin Scholarships for Teachers, .	4,000.00	
Bartlett, . . . . .	250.00	
Bassett, . . . . .	270.00	
Bigelow, . . . . .	600.00	
Bowditch, . . . . .	5,250.00	
Bright (part), . . . . .	1,250.00	
Browne, . . . . .	175.00	
Morey Willard Buckminster, . . . . .	250.00	
Burr, . . . . .	1,600.00	
Ruluff Sterling Choate, . . . . .	275.00	
George Newhall Clark, . . . . .	500.00	
Thomas William Clarke, . . . . .	225.00	
Class of 1802, . . . . .	375.00	
" 1814, . . . . .	150.00	
" 1815 (Kirkland), . . . . .	300.00	
" 1817, . . . . .	200.00	
" 1828, . . . . .	200.00	
" 1835, . . . . .	225.00	
" 1841, . . . . .	225.00	
" 1852 (Dana), . . . . .	225.00	
" 1856, . . . . .	750.00	
" 1867, . . . . .	325.00	
" 1877, . . . . .	225.00	
" 1883, . . . . .	275.00	
" 1901, . . . . .	300.00	
Clement Harlow Condell, . . . . .	1,000.00	
Crowninshield, . . . . .	550.00	
Warren H. Cudworth, . . . . .	300.00	
George and Martha Derby, . . . . .	250.00	
Julius Dexter, . . . . .	225.00	
Orlando W. Doe, . . . . .	100.00	
William Samuel Eliot, . . . . .	250.00	
George H. Emerson, . . . . .	225.00	
Joseph Eveleth (part), . . . . .	400.00	
Fall River, . . . . .	100.00	
Farrar, . . . . .	275.00	
Amounts carried forward, . . . . .	\$32,270.00	\$32,650.09

## COLLEGE (CONTINUED)

## EXPENDITURE

Amounts brought forward, . . . . \$32,270.00      \$32,650.09

From Scholarship Funds and Gifts (*continued*).

## George Fisher and Elizabeth Huntington

Fisher, . . . . .	200.00
Richard Augustine Gambrill, . . . . .	525.00
Charles Haven Goodwin, . . . . .	350.00
Benjamin D. Greene, . . . . .	200.00
Price Greenleaf (part), . . . . .	2,880.00
Selwyn L. Harding, . . . . .	225.00
Harvard Club of Boston, . . . . .	1,000.00
“ “ Buffalo, . . . . .	200.00
“ “ Cleveland, . . . . .	400.00
“ “ Connecticut Valley, . . . . .	200.00
“ “ Fitchburg, . . . . .	150.00
“ “ Hawaii, . . . . .	200.00
“ “ Hingham, . . . . .	100.00
“ “ Lawrence, . . . . .	200.00
“ “ Louisiana, . . . . .	257.14
“ “ Lowell, . . . . .	350.00
“ “ Lynn, . . . . .	100.00
“ “ Maine, . . . . .	150.00
“ “ Nebraska, . . . . .	150.00
“ “ New Jersey, . . . . .	250.00
“ “ Western Pennsylvania, . . . . .	600.00
“ “ Rhode Island, . . . . .	150.00
“ “ Rochester, N. Y., . . . . .	200.00
“ “ St. Louis, . . . . .	440.10
“ “ San Francisco, . . . . .	500.00
“ “ Seattle, . . . . .	300.00
“ “ Syracuse, . . . . .	200.00
“ “ Washington, . . . . .	250.00
“ “ Worcester, . . . . .	200.00
John Appleton Haven, . . . . .	475.00
William Hilton (part), . . . . .	225.00
Scholarship in American History, . . . . .	300.00
Ebenezer Rockwood Hoar, . . . . .	500.00
Levina Hoar, for the town of Lincoln, . . . . .	300.00
R. M. Hodges (part), . . . . .	275.00
Hollis, . . . . .	275.00
Henry B. Humphrey, . . . . .	500.00
Charles L. Jones, . . . . .	1,350.00
George Emerson Lowell, . . . . .	450.00
Markoe, . . . . .	250.00
Matthews, . . . . .	4,700.00
William Merrick, . . . . .	275.00

Amounts carried forward, . . . . \$48,072.24      \$32,650.09

## COLLEGE (CONTINUED)

## EXPENDITURE

Amounts brought forward, . . . . .	\$48,072.24	\$32,650.09
From Scholarship Funds and Gifts ( <i>continued</i> ).		
Morey, . . . . .	375.00	
Lady Mowlson, . . . . .	250.00	
Boston Newsboys', . . . . .	150.00	
Howard Gardner Nichols, . . . . .	250.00	
Lucy Osgood, . . . . .	275.00	
George Foster Peabody, . . . . .	250.00	
C. E. Perkins Scholarship, . . . . .	900.00	
Rebecca A. Perkins, . . . . .	200.00	
Philadelphia, . . . . .	500.00	
Wendell Phillips Memorial, . . . . .	75.00	
Ricardo Prize Gift, . . . . .	350.00	
Henry Bromfield Rogers, . . . . .	150.00	
Nathaniel Ropes, Jr., . . . . .	475.00	
James A. Rumrill, . . . . .	675.00	
Edward Russell, . . . . .	250.00	
Sales, . . . . .	250.00	
Saltonstall, . . . . .	525.00	
Leverett Saltonstall, . . . . .	400.00	
Mary Saltonstall, . . . . .	300.00	
James Savage (part), . . . . .	300.00	
Sever, . . . . .	150.00	
Sewall, . . . . .	500.00	
Shattuck, . . . . .	2,100.00	
Slade, . . . . .	275.00	
Dunlap Smith, . . . . .	200.00	
Story, . . . . .	200.00	
Stoughton, . . . . .	150.00	
Charles Sumner, . . . . .	200.00	
Swift, . . . . .	200.00	
Thayer, . . . . .	8,500.00	
Gorham Thomas, . . . . .	200.00	
Toppan, . . . . .	700.00	
Townsend, . . . . .	1,000.00	
Walcott, . . . . .	200.00	
Christopher M. Weld, . . . . .	500.00	
Jacob Wendell, . . . . .	300.00	
Whiting, . . . . .	550.00	
Josiah Dwight Whitney, . . . . .	242.50	
Mary L. Whitney, . . . . .	500.00	
Willard, . . . . .	475.00	
Charles Wyman, . . . . .	450.00	62,564.74
Amount carried forward, . . . . .		\$95,214.83

## COLLEGE (CONTINUED)

## EXPENDITURE

Amount brought forward, . . . . .		\$95,214.83
From Beneficiary and Loan Funds and Gifts.		
Rebecca C. Ames, . . . . .	\$2,435.00	
Anonymous Gifts for Special Aid, . . . . .	1,175.00	
Nathaniel Appleton, . . . . .	38.16	
Edward Austin Loan (Special Students), . .	364.00	
Frank Bolles Memorial, . . . . .	90.00	
William Brattle, . . . . .	94.80	
Daniel A. Buckley (part), . . . . .	6,200.00	
Walter Channing Cabot, . . . . .	2,000.00	
Edward Erwin Coolidge (part), . . . . .	700.00	
Thomas Danforth, . . . . .	67.27	
Moses Day, . . . . .	270.96	
John Ellery, . . . . .	27.13	
Calvin and Lucy Ellis Aid (part), . . . .	2,880.00	
Exhibitions, . . . . .	67.02	
Fines, Loan Fund, . . . . .	304.75	
Ephraim Flynt, . . . . .	29.85	
Henry Flynt, . . . . .	10.54	
Freshman Loan, . . . . .	885.00	
Henry Gibbs, . . . . .	30.55	
John Glover, . . . . .	166.58	
Price Greenleaf Aid, . . . . .	14,469.00	
Edwin A. W. Harlow, . . . . .	255.00	
Robert Henry Harlow, . . . . .	241.00	
Student Fund of the Harvard Engineering Society of New York, . . . . .	50.00	
Edward Holyoke, . . . . .	21.85	
Robert Keayne, . . . . .	146.57	
Bertram Kimball, . . . . .	1,261.00	
Harry Milton Levy Loan, . . . . .	475.00	
Mary Lindall, . . . . .	68.81	
The Loan, . . . . .	7,944.00	
Susan B. Lyman, . . . . .	239.25	
Anne Mills, . . . . .	14.80	
John F. Moors' Gift, . . . . .	50.00	
Munroe, . . . . .	470.00	
Palfrey Exhibition, . . . . .	80.00	
Dr. Andrew P. Peabody Memorial, . . . .	172.75	
Scholarship and Beneficiary Money Returned, .	2,325.00	
Alexander Wheelock Thayer, . . . . .	345.95	
Quincy Tufts, . . . . .	553.01	
Benjamin Wadsworth, . . . . .	19.00	47,082.60
From Prize Funds and Gifts for Prizes.		
Jeremy Belknap, . . . . .	\$50.00	
James Gordon Bennett, . . . . .	40.00	
Francis Boott (part), . . . . .	90.00	
Amounts carried forward, . . . . .	\$180.00	\$142,247.43

## COLLEGE (CONTINUED)

## EXPENDITURE

Amounts brought forward, . . . . .	\$180.00	\$142,347.43
<b>From Prize Funds and Gifts for Prizes (<i>continued</i>).</b>		
Bowdoin Prizes for Dissertations, . . . . .	1,284.88	
Boylston Prizes for Elocution, . . . . .	210.00	
Coolidge Debating, . . . . .	219.03	
Dante, . . . . .	100.00	
Lloyd McKim Garrison, . . . . .	111.75	
Edward Hopkins Gift for "Deturs," . . .	128.74	
Menorah Society, . . . . .	100.00	
Susan Anthony Potter Prizes, . . . . .	225.00	
Sales, . . . . .	45.00	
John O. Sargent, . . . . .	100.00	
George B. Sohler, . . . . .	250.00	
Old Testament Study, . . . . .	75.00	
Robert N. Toppan, . . . . .	150.00	
Philip Washburn, . . . . .	75.00	
David A. Wells, . . . . .	658.03	3,911.98
<b>For University Scholarships.</b>		
Undergraduate:		
Normal, . . . . .	\$600.00	
Graduate School of Arts and Sciences, . . . . .	4,940.00	5,540.00
<b>From Sundry Funds and Balances for Special Purposes.</b>		
Francis Boott, books for the Department of Music, . . . . .	\$229.81	
Francis James Child Memorial, books, . .	584.62	
Classical Publication Fund of the Class of 1856:		
Harvard Studies in Classical Philology, . .	1,280.92	
T. Jefferson Coolidge for Research in Physics, .	2,462.58	
Book Fund of the Class of 1881, books for the Department of Chemistry, . . . . .	280.61	
George A. Gardner, for photographs, etc., for the Department of Geology, . . . . .	248.76	
Harvard Oriental Series, publications, . . .	527.24	
Harvard Economic Studies, . . . . .	53.81	
History Book Fund (History 1), . . . . .	106.88	
Joseph Lovering for Physical Research, . .	367.29	
Mathematics Book Fund, . . . . .	65.75	
Francis G. Peabody, . . . . .	\$3,500.00	
Less amount paid for salaries, . . . . .	3,500.00	
<b>Nelson Robinson Jr. Additional (part).</b>		
Psychological Laboratory, . . . . .	\$1,801.62	
Books, . . . . .	311.29	
Expenses, . . . . .	88.77	
Librarian Department Philosophy, . . . . .	1,000.00	
	\$3,651.68	
Less paid for salaries, . . . . .	1,000.00	1,651.68
Amounts carried forward, . . . . .	\$7,809.45	\$151,699.36



## COLLEGE (CONTINUED)

## EXPENDITURE

Amounts brought forward, . . . . .	\$7,809.45	\$151,699.36
From Sundry Funds and Balances for Special Purposes ( <i>continued</i> ).		
Robert W. Sayles for Department of Geology, . . . . .	8.63	
Shaler Memorial, . . . . .	29.00	
Elizabeth Torrey Bequest, . . . . .	195.40	
Henry Warren Torrey, publications, . . . . .	599.75	
Unknown Memorial (part), services and expenses, . . . . .	2,829.48	
Cyrus M. Warren, research in Chemistry, . . . . .	557.72	
Henry C. Warren, publications and books, . . . . .	1,913.52	
David A. Wells, Harvard Economic Studies, . . . . .	2,637.52	
Jefferson Physical Laboratory:		
Services and wages, . . . . .	\$2,042.75	
Operating expense, . . . . .	\$1,906.31	
Less paid from General		
Income, . . . . .	600.00	1,306.31
University charge:		
Treasurer's Office, care of investments, . . . . .	82.85	
Bursar's Office, collections and payments, . . . . .	148.68	
Watchmen, . . . . .	77.88	3,658.47
		20,238.94
From Gifts and Fees, etc., for Special Purposes.		
For Department of Economics:		
Gift for Department, . . . . .	\$2,286.61	
Less paid for Salaries, . . . . .	1,550.00	736.61
Gift for Publishing History of English Customs, . . . . .	200.00	
For Department of Fine Arts, . . . . .	25.00	
For Department of Mathematics:		
Gift for Expenses of Commission on teaching Mathematics, . . . . .	100.00	
For Department of Chemistry:		
Edward Mallinckrodt gift, . . . . .	14.41	
For Department of Philosophy:		
Philosophical Library Books, . . . . .	78.88	
For Department of Ethics Social Questions, general, . . . . .	2,959.74	
" " " " " Gift for books, . . . . .	6.90	
Furnishings for the Department of Social Ethics, . . . . .	206.10	
For Division of Music, . . . . .	408.29	
" " " " " Gift for services, . . . . .	100.00	
For Department of Physics, Physical Research, . . . . .	515.00	
Fellowship in Physical Research, . . . . .	\$500.00	
Less paid for salaries, . . . . .	500.00	
Amounts carried forward, . . . . .	\$5,350.48	\$171,938.30

## COLLEGE (CONTINUED)

## EXPENDITURE

Amounts brought forward, . . . .	\$5,350.48	\$171,988.80
<b>From Gifts and Fees, etc., for Special Purposes</b> (continued).		
Department of Botany, John S. Ames Gift, .	850.00	
"    Zoölogy, Bermuda Biological Sta- tion, . . . . .	486.88	
Department of Geology, Exhibition Case for Photographs, . . . . .	54.69	
Semitic Library, books, . . . . .	141.48	
Department of Classics, books, . . . . .	248.47	
"    "    "    Lecturers, . . . . .	1,000.00	
School for Social Workers, . . . . .	\$1,859.16	
Less paid for salaries, . . . . .	<u>1,000.00</u>	859.16
Department of Government:		
Anonymous gift for Research, . . . . .	958.86	
Gift David A. Ellis, books, . . . . .	15.86	
Gift F. G. Thomson, . . . . .	\$8,908.11	
Less paid for salaries, . . . . .	<u>2,750.00</u>	1,158.11
Gifts F. G. Thomson and Clarke Thomson, for Bureau of Municipal Research, . . . . .	2,500.00	
Gift for Plantation of Shrubs, etc., . . . . .	<u>8,879.78</u>	16,948.57
<b>Administration Offices.</b>		
Dean of the Faculty of Arts and Sciences:		
Salary, . . . . .	\$500.00	
Services and wages, . . . . .	874.66	
Office supplies and expenses, . . . . .	<u>167.97</u>	1,542.63
Dean of Harvard College:		
Salaries, . . . . .	\$10,800.00	
Services and wages, . . . . .	7,435.62	
Office supplies and expenses, . . . . .	<u>2,899.27</u>	20,134.89
Dean and Secretary of the Graduate School of Arts and Sciences:		
Salaries, . . . . .	\$2,500.00	
Services and wages, . . . . .	884.00	
Office supplies and expenses, . . . . .	<u>592.98</u>	3,926.98
Dean of the Graduate School of Business Administration:		
Salary, . . . . .		1,000.00
Secretary of the Faculty of Arts and Sciences:		
Salaries, . . . . .	\$2,750.00	
Services and wages, . . . . .	2,326.75	
Office supplies and expenses, . . . . .	<u>991.81</u>	6,068.06
Amount carried forward, . . . . .		<u>\$321,559.88</u>

## COLLEGE (CONTINUED)

## EXPENDITURE

Amount brought forward, . . . . .		\$221,559.38
<b>From Appropriations.</b>		
Anthropology, . . . . .	\$41.76	
Botany, . . . . .	3,849.00	
Classics, . . . . .	200.00	
Economics, . . . . .	\$199.70	
Office expenses, . . . . .	600.00	799.70
Education, . . . . .	118.95	
English, . . . . .	280.10	
Fine Arts, . . . . .	554.31	
French and other Romance Languages, . . . . .	1,400.00	
Geology, . . . . .	50.00	
German, . . . . .	741.59	
Government, . . . . .	97.81	
History, . . . . .	812.50	
Mathematics, . . . . .	225.00	
Mineralogy and Petrography, . . . . .	380.24	
Music, . . . . .	250.00	
Philosophy, . . . . .	100.00	
Physics, . . . . .	1,000.00	
Psychology, . . . . .	141.18	
Zoölogy, . . . . .	65.93	10,558.07
<b>From Laboratory Fees.</b>		
Astronomy, . . . . .	\$1,398.68	
Botany, . . . . .	1,310.26	
Chemistry, . . . . .	15,531.36	
Geology, . . . . .	1,073.36	
Hygiene, . . . . .	1,847.09	
Mineralogy, . . . . .	304.39	
Music, . . . . .	150.00	
Physics, . . . . .	3,164.06	
Psychology, . . . . .	235.00	
Zoölogy, . . . . .	1,280.39	26,294.59
<b>For College Public Buildings, which are not valued in the Treasurer's books.</b>		
Repairs and Equipment, . . . . .	\$9,939.14	
Caretaking and Operating Expenses, . . . . .	23,104.58	33,043.72
<b>For College Dormitories: Hollis, Stoughton, Holworthy, Thayer, Weld, Wadsworth House, Walter Hastings, Perkins, and Conant, which are not valued in the Treasurer's books; and for Matthews Hall.</b>		
Repairs and Equipment, . . . . .	\$10,759.19	
Caretaking and Operating Expenses, . . . . .	29,155.80	39,914.99
Amount carried forward, . . . . .		\$381,370.25

## COLLEGE (CONTINUED)

## EXPENDITURE

Amount brought forward, . . . . .		\$331,370.35
<b>General.</b>		
Salaries for Instruction :		
Edward Austin (part) :		
Austin Teaching Fellowships, \$12,052.61		
From Sundry Funds and Gifts, . 220,797.18		
From General Income, . . . . . 265,232.20		
	\$498,081.99	
Services and wages, . . . . .	5,882.55	
Proctors, . . . . .	2,606.64	
Equipment and supplies, . . . . .	1,103.79	
Blue-books, . . . . .	438.08	
Printing, . . . . .	8,563.36	
Pension for Bell-Ringer, . . . . .	625.00	
Diplomas, . . . . .	538.71	
Stationery, postage, telephone, etc., . . . . .	562.83	
Monitorships, . . . . .	1,267.95	
Special lecturers, . . . . .	125.00	
Subscription to American School of Classical		
Studies, . . . . .	250.00	
Music Class Day, . . . . .	125.00	
Collection of term-bills, . . . . .	88.09	
Refreshments at Faculty Meetings, . . . . .	67.73	
College Entrance Examination Board, . . . . .	100.00	
Graduate School Reception, . . . . .	84.66	
Sundries, . . . . .	763.90	521,225.28
<b>Printing Office.</b>		
Services and wages, . . . . .	\$19,477.29	
Supplies and equipment, . . . . .	13,737.07	
Printing, . . . . .	268.80	
Repairs, . . . . .	117.88	
Binding, . . . . .	3,627.76	
Sundries, . . . . .	153.15	
	\$37,381.95	
Expenses carried contra and deducted from sales		
to Departments, . . . . .	37,381.95	
<b>Admission Examinations.</b>		
Cambridge :		
Services and wages, . . . . .	\$1,823.95	
Reading books, . . . . .	4,114.20	
Office supplies and expenses, . . . . .	1,144.60	7,082.75
Outside Cambridge :		
Service, . . . . .	\$2,371.00	
Expenses, . . . . .	1,084.72	3,455.72
Annals of Mathematics, . . . . .		251.01
Amount carried forward, . . . . .		\$863,385.01

## LIBRARY (CONTINUED)

## INCOME

Amount brought forward, . . . . .	\$21,093.08	
Income of Book Funds and Gifts and Receipts for the purchase of books ( <i>continued</i> ).		
Ishabod Tucker, . . . . .	216.55	
20th Mass. Regiment of Volunteer Infantry, . . .	30.44	
Wales Income for Books, . . . . .	285.71	
James Walker, . . . . .	787.19	
Thomas W. Ward, . . . . .	259.88	
Julian Palmer Welsh Memorial, . . . . .	149.10	
J. Huntington Wolcott, . . . . .	990.99	
Gifts for books. Gifts, . . . . .	\$16,951.07	
Interest, . . . . .	282.82	17,233.89
Sale of duplicate books, . . . . .	1,282.80	
Received for books lost, . . . . .	77.85	\$42,406.48
Income of R. M. Hodges Fund (part).		
For publishing bibliographical contributions, . . . . .		418.46
Income of Funds for general purposes.		
Daniel Austin, . . . . .	\$386.44	
Edwin Conant ( $\frac{1}{2}$ income), . . . . .	1,035.83	
Constantius ( $\frac{1}{2}$ income), . . . . .	640.83	
Fund of the Class of 1851, . . . . .	43.96	
" " " " (C. F. Dunbar's Gift), . . . . .	43.31	
Price Greenleaf (part), . . . . .	15,678.95	
Henry L. Pierce, . . . . .	2,475.00	
Henry L. Pierce, Residuary (part), . . . . .	2,358.12	
Stephen Salisbury Bequest, . . . . .	253.44	
James Savage (part), . . . . .	1,334.25	
Daniel Treadwell ( $\frac{1}{2}$ income), . . . . .	295.14	
Eben Wright, . . . . .	4,950.00	29,495.27
Fees for use of Library, . . . . .	\$95.00	
Fines, . . . . .	570.23	
Gifts for additional service, return of part payment made in 1910-11, . . . . .	56.68	
Gifts for general use, . . . . .	1,000.00	
Sales of Bibliographical Contributions, . . . . .	3.20	
Sales of Sundry publications, . . . . .	14.35	
Sales printed cards, . . . . .	1,368.71	3,108.17
		\$75,428.38
General Deficit, made up as follows:		
Funds and Gifts, accumulated income, . . . . .	\$19,346.56	
Advances to Funds, carried to General Suspense, . .	1,628.94	
Deficit carried to Schedule 10, . . . . .	36,360.50	
	\$57,336.00	
Less Restricted Income unused, added to		
Funds and Gifts, . . . . .	\$1,963.40	
Restricted Income carried to General Suspense to repay former advances, . . . . .	258.60	2,222.00
		55,114.00
		<u>\$130,542.38</u>

## LIBRARY (CONTINUED)

## EXPENDITURE

For Books, from the following Funds, Gifts, etc.

Bowditch, . . . . .	\$107.85
Bright, . . . . .	1,497.77
Castle, . . . . .	129.52
Edwin Conant, . . . . .	478.27
Constantius, . . . . .	344.21
A. C. Coolidge and C. L. Hay, . . . . .	32.50
W. Bayard Cutting Bequest, . . . . .	581.26
Bayard Cutting Fellowship, . . . . .	17.70
Denny, . . . . .	361.53
Farrar, . . . . .	616.77
Price Greenleaf (part), . . . . .	995.95
Charles Gross Memorial, . . . . .	64.44
Haven, . . . . .	224.72
Hayes, . . . . .	588.33
Hayward, . . . . .	359.57
Hollis, . . . . .	127.58
Homer, . . . . .	96.74
Jarvis, . . . . .	27.49
Lane, . . . . .	319.14
G. C. Lodge and J. T. Stickney Memorial, . . . . .	185.00
Lowell, . . . . .	632.34
Francis Cabot Lowell, . . . . .	426.17
Minot, . . . . .	2,796.28
Charles Eliot Norton, . . . . .	519.20
Lucy Osgood, . . . . .	432.44
Mary Osgood, . . . . .	387.84
Francis Parkman Memorial, . . . . .	236.67
George F. Parkman, . . . . .	1,401.31
Sales, . . . . .	221.84
Salisbury, . . . . .	226.02
Sever, . . . . .	1,337.43
Shapleigh, . . . . .	200.83
George B. Sohler (part), . . . . .	174.74
Strobel Memorial (1877), . . . . .	83.55
"    "    (Siam), . . . . .	44.28
Subscription, . . . . .	508.87
Sumner, . . . . .	1,919.44
Kenneth Matheson Taylor, . . . . .	313.58
Daniel Treadwell, . . . . .	266.14
John Harvey Treat, . . . . .	2,478.93
Tucker, . . . . .	309.53
Wales, . . . . .	101.04
Walker, . . . . .	908.26
Ward, . . . . .	160.39

Amount carried forward, . . . . . \$33,243.46

## LIBRARY (CONTINUED)

## EXPENDITURE

Amount brought forward, . . . . .	\$33,243.46	
For Books, from the following Funds, Gifts, etc. (continued).		
Julian Palmer Welsh Memorial, . . . . .	142.63	
J. Huntington Wolcott, . . . . .	977.66	
From Sundry gifts for books (balances), . . . . .	20,405.88	
Duplicate money and receipts for lost books, . . . . .	1,352.85	
Fines, . . . . .	704.07	\$46,826.49
From R. M. Hodges Fund, publishing bibliographical contributions, . . . . .		379.88
General.		
Salaries, . . . . .	\$33,696.68	
Services and wages (part), . . . . .	34,489.81	
Equipment and supplies, . . . . .	5,791.27	
Stationery, postage, telephone and telegraph, . . . . .	836.08	
Binding, . . . . .	4,378.64	
General printing, . . . . .	529.25	
Printed cards, . . . . .	4,596.64	
Moving and cleaning books, . . . . .	550.81	
Laundry, . . . . .	66.00	
Sundries, . . . . .	91.19	
Special Reference Libraries, services, . . . . .	1,278.00	
Repairs and equipment, land and building, . . . . .	1,393.07	
Caretaking, land and building, . . . . .	4,127.08	81,724.42
University charge:		
Treasurer's Office, care of investments, . . . . .	\$722.68	
Bursar's Office, collections and payments, . . . . .	880.84	
Inspector of Grounds and Buildings, salary and expenses, . . . . .	223.82	
Annual Catalogue, . . . . .	16.32	
Watchmen, . . . . .	160.65	
Engineer, . . . . .	86.14	
Purchasing Agent, . . . . .	21.19	1,611.64
		<u>\$180,542.38</u>

## SCHEDULE 10

### UNIVERSITY, COLLEGE, AND LIBRARY COMBINED ACCOUNTS

For the year ended June 30, 1912

Deficit in Library, Schedule 9, . . . . .	\$36,360.50	
Surplus in University, Schedule 7, . . . . .	\$18,957.36	
Surplus in College, Schedule 8, . . . . .	2,652.74	21,610.10
Deficit met by the unrestricted principal of the <u>Walter F. Baker Fund</u> , . . . . .		<u>\$14,750.40</u>

## SCHEDULE 11

### SUMMER SCHOOLS FACULTY OF ARTS AND SCIENCES INCOME AND EXPENDITURE

For the year ended June 30, 1912

#### INCOME

##### School of 1911.

Gift for expenses at Appleton Chapel, . . . . .	\$70.00	
" course in Music, . . . . .	250.00	\$320.00
Receipts from students :		
Tuition fees, . . . . .	\$30,469.00	
Registration fees, . . . . .	2,229.00	
Auditors fees, . . . . .	910.00	
Historical Excursions, . . . . .	145.14	23,758.14
Sundries, . . . . .		108.88
		<u>24,181.47</u>

##### School of 1912.

Income of <u>Sayles Fund</u> , Summer Course in Geology, . . . . .	\$512.33	
Gift for lectures, . . . . .	50.00	
Sundries, . . . . .	7.00	569.33
		<u>\$24,750.80</u>

#### EXPENDITURE

##### School of 1911.

Dean's Office :		
Salary of Dean, . . . . .	\$1,000.00	
Services and wages, . . . . .	148.88	
Office supplies, . . . . .	48.87	
Printing, . . . . .	136.40	\$1,338.60
Salaries for Instruction, . . . . .	12,080.00	
General Expenses, . . . . .		301.47
Public Exercises and Historical Excursions, . . . . .		551.77
Hospitality, . . . . .		351.31
Amount carried forward, . . . . .	\$14,618.15	



## SUMMER SCHOOLS (CONTINUED)

## EXPENDITURE

Amount brought forward, . . . . .		\$14,618.15	
School of 1911 ( <i>continued</i> ).			
Postage, . . . . .		8.62	
Shop-work courses, . . . . .		528.00	
Catalogue of students, . . . . .		111.45	
Scholarships, . . . . .		95.00	
University charge:			
Bursar's Office, collections and pay-			
ments, . . . . .	\$359.77		
Publication Office, Expenses, . . .	215.06		
	<u>\$574.83</u>		
Less amount transferred to Schedule 8,	279.77	295.06	\$15,656.28
School of Physical Education, . . . . .			4,852.25
School of 1912.			
From Sayles Fund, . . . . .		\$500.00	
Dean's Office:			
Services and wages, . . . . .	\$838.12		
Office supplies, . . . . .	148.43		
Printing, . . . . .	47.20		
Sundries, . . . . .	<u>2.00</u>	1,035.75	
General Expenses, . . . . .		239.95	
Advertising, . . . . .		1,060.33	
Postage, . . . . .		<u>168.76</u>	3,004.79
School of Physical Education, . . . . .			83.88
			<u>\$33,597.20</u>
General Surplus made up as follows:			
Restricted Income carried to General Suspense to			
repay former advance, . . . . .		\$1.25	
Restricted Income unused, added to Funds and Gifts,		61.08	
Surplus, carried to General Suspense, . . . . .	1,091.27	1,153.60	
			<u><u>\$24,750.80</u></u>

SCHEDULE 12

GRADUATE SCHOOL OF APPLIED SCIENCE

INCOME AND EXPENDITURE

For the year ended June 30, 1912

INCOME

**Income of Funds for Instruction or for General Purposes.**

Graduate School of Applied Science Balance,		
interest, . . . . .	\$539.55	
<b>Edward Austin (part):</b>		
Austin Teaching Fellowships, . . . . .	1,500.00	
James Lawrence (part), . . . . .	1,246.78	
Gordon McKay Endowment, . . . . .	69,255.80	
Professorship of Engineering, . . . . .	2,019.90	
Nelson Robinson, Jr. (part), . . . . .	20,926.54	
Arthur Rotch, . . . . .	1,237.50	
Gurdon Saltonstall, . . . . .	2,970.00	
Josiah Stickney, . . . . .	588.70	\$100,279.77

**Income of Fellowship Funds.**

Julia Amory Appleton, . . . . .	\$1,036.84	
Nelson Robinson, Jr. (part), . . . . .	1,016.68	
Frederick Sheldon (part), . . . . .	1,000.00	3,053.02

**Income of Scholarship Funds.**

<b>Edward Austin (part):</b>		
Austin Scholarships in Architecture, . . .	\$900.00	
Daniel A. Buckley (part), . . . . .	800.00	
Francis H. Cummings, . . . . .	327.64	
George H. Emerson (part), . . . . .	450.00	
Joseph Eveleth (part), . . . . .	400.00	
William Hilton (part), . . . . .	225.00	
Priscilla Clark Hodges, . . . . .	209.19	
Hennen Jennings, . . . . .	587.47	
Henry Weidemann Locke (gift), . . . . .	100.00	
Edward Dyer Peters (gift), . . . . .	250.00	
Special Scholarship (gift), . . . . .	200.00	3,949.80

**Income Loan Funds and Repayments.**

Edward Austin Loans repaid, interest, . . . .	\$59.05	
<b>Lawrence Scientific School Loans repaid:</b>		
Interest, . . . . .	\$360.17	
Loans repaid, . . . . .	299.37	659.54
Susan B. Lyman (L.S.S.), interest, . . . .	98.82	817.41

**Income Sundry Funds and Gifts for Special Purposes.**

<b>Department of Architecture:</b>		
Nelson Robinson, Jr. Fund (part), . .	\$5,281.78	
Gift for Equipment (interest), . . . . .	179.70	
<b>N. Robinson special gift for salary:</b>		
Interest, . . . . .	424.49	
Amounts carried forward, . . . . .	\$5,885.97	\$108,099.50

## GRADUATE SCHOOL OF APPLIED SCIENCE (CONTINUED)

## INCOME

Amounts brought forward, . . . . .	\$5,885.97	\$108,099.50
Income Sundry Funds and Gifts for Special Purposes (continued).		
Department of Engineering:		
Engineering Camp at Squam Lake, . . . . .	12,519.99	
Department of Forestry:		
Gift for Division of Forestry:		
Gift, . . . . .	\$1,980.00	
Interest, . . . . .	108.47	2,088.47
Sales lumber, wood, etc., . . . . .	\$4,919.99	
Lodgings at Forestry House, . . . . .	196.50	5,116.49
Department of Mining and Metallurgy:		
Summer School Mining Camp—interest, . . . . .	16.19	25,637.11
Receipts from Students.		
Tuition fees, . . . . .	\$16,985.00	
Graduation fees, . . . . .	720.00	
Laboratory fees:		
Engineering, . . . . .	\$1,083.25	
Forestry, . . . . .	98.45	
Mining and Metallurgy, . . . . .	2,548.74	3,730.44
Shop-work fees, . . . . .	1,677.00	
Registration fees in Architecture, . . . . .	15.00	23,127.44
Sundries.		
Amount contributed from the General Funds of Harvard College for Salaries and Expenses, . . . . .	\$71,695.58	
Amount contributed by Bussey Institution to pay salary of instructor in Landscape Architecture, . . . . .	1,800.00	
Sales of Architectural Quarterly, . . . . .	188.96	73,634.54
		\$230,488.59
General Deficit made up as follows:		
Accumulated Income and Gifts used, . . . . .	\$7,402.11	
Deficit for 1911-12, carried to General Suspense, . . . . .	409.26	
	\$7,811.37	
Less Restricted Income unused, carried to		
Funds and Gifts, . . . . .	\$6,378.23	
General Suspense, . . . . .	876.77	6,755.00
		1,056.37
		<u>\$331,544.96</u>

## EXPENDITURE

From Fellowship Funds.		
Julia Amory Appleton, . . . . .	\$1,000.00	
Nelson Robinson, Jr., . . . . .	1,016.68	
Frederick Sheldon (part), . . . . .	1,000.00	\$3,016.68
Amount carried forward, . . . . .		\$3,016.68

## GRADUATE SCHOOL OF APPLIED SCIENCE (CONTINUED)

## EXPENDITURE

Amount brought forward, . . . . .		\$3,016.68	
<b>From Scholarship Funds and Gifts.</b>			
Edward Austin Scholarships in Architecture,	\$900.00		
Daniel A. Buckley, . . . . .	300.00		
Francois H. Cummings, . . . . .	275.00		
George H. Emerson (part), . . . . .	450.00		
Joseph Eveleth, . . . . .	400.00		
William Hilton (part), . . . . .	225.00		
Priscilla Clark Hodges, . . . . .	175.00		
Hennen Jennings, . . . . .	525.00		
Henry Weidemann Locke (gift), . . . . .	100.00		
Mining and Metallurgy Department Scholarship (gift), . . . . .	150.00		
Edward Dyer Peters, . . . . .	250.00		
Special Scholarship (gift), . . . . .	200.00		
			3,950.00
<b>From Loan Funds.</b>			
Edward Austin Loans repaid, . . . . .			330.00
<b>For University Scholarships.</b>			
Architectural League, . . . . .	\$540.00		
General, . . . . .	1,950.00		
			2,490.00
<b>From Sundry Funds and Gifts for Special Purposes.</b>			
Department of Architecture :			
Equipment, . . . . .	\$2,585.35		
Nelson Robinson, special gift			
for salaries, . . . . .	\$5,000.00		
Less amount charged for salaries, 5,000.00			
<b>Nelson Robinson, Jr. :</b>			
Expense of Nelson Robinson, Jr.			
Hall, . . . . .	\$4,868.76		
University charge :			
Bursar, . . . . .	\$80.42		
Inspector of Grounds and			
Buildings, . . . . .	127.68		
Janitor, . . . . .	89.63		
Engineer, . . . . .	48.96		
Watchman, . . . . .	91.33	418.02	5,281.78
Department of Engineering :			
Engineering Camp at Squam Lake, . . . . .			12,514.18
Department of Forestry :			
Ames Butler gift, . . . . .	\$1,670.43		
Less amount paid for salaries, 1,300.00			
			370.43
Operations, . . . . .		4,749.13	
House account, . . . . .		235.74	25,786.56
Amount carried forward, . . . . .			\$35,523.24

**GRADUATE SCHOOL OF APPLIED SCIENCE (CONTINUED)**  
**EXPENDITURE**

Amount brought forward, . . . . .		\$35,523.24	
<b>Dean's Office:</b>			
Salary, . . . . .	\$2,500.00		
Services and wages, . . . . .	934.11		
Equipment and supplies, . . . . .	52.60		
Stationery, postage, telephone and telegraph, . .	310.41		
Printing, . . . . .	22.70		
Sundries, . . . . .	5.80		3,825.62
<b>From Appropriations:</b>			
Architecture, . . . . .	\$951.66		
Landscape Architecture, . . . . .	1,630.42		
Engineering, . . . . .	37,708.28		
Forestry, . . . . .	229.23		
Mining and Metallurgy, . . . . .	1,135.76		
Quarterly Journal of Architecture, . . . . .	2,006.68		43,662.03
<b>From Laboratory Fees:</b>			
Engineering, . . . . .	\$1,083.25		
Forestry, . . . . .	74.05		
Mining and Metallurgy, . . . . .	2,333.85		3,491.15
<b>General.</b>			
<b>Salaries for Instruction:</b>			
<b>Edward Austin (part):</b>			
Austin Teaching Fellowships, \$1,500.00			
From Sundry Funds and Gifts, . .	30,284.42		
From General Income, . . . . .	94,283.35	\$126,067.77	
Services and wages, . . . . .	1,044.24		
Equipment and supplies, . . . . .	92.43		
Printing, . . . . .	1,198.21		
Travelling expenses, . . . . .	155.96		
Shop-work courses, . . . . .	1,097.61		
Taxes Harvard Forest, . . . . .	964.77		
Advertising, . . . . .	91.63		
Diplomas, . . . . .	34.68		
Legal services, . . . . .	40.00		
Expenses of lecture, . . . . .	86.83		130,824.13
Repairs and Equipment, Pierce Hall and Rotch Building, . . . . .	\$2,128.07		
Caretaking, Pierce Hall and Rotch Building, . . .	7,592.65		9,720.72
<b>University charge.</b>			
President's Office, salaries and expenses, . . . .	\$322.39		
Treasurer's Office, care of investments, . . . .	1,445.38		
Bursar's Office, collections and payments, . . . .	1,067.82		
Publication Office, salary and expenses, . . . .	358.45		
Inspector of Grounds and Buildings, salary and expenses, . . . . .	413.48		
Amounts carried forward, . . . . .	\$3,607.52	\$327,046.89	

## GRADUATE SCHOOL OF APPLIED SCIENCE (CONTINUED)

## EXPENDITURE

Amounts brought forward, . . . . .	\$3,607.52	\$327,046.89
University charge ( <i>continued</i> ).		
Medical adviser, salary and expenses, . . . . .	96.90	
Quinquennial Catalogue, . . . . .	8.42	
Annual Catalogue, . . . . .	176.47	
Watchmen, . . . . .	166.88	
Engineer, . . . . .	81.18	
Labor, etc., . . . . .	4.26	
Purchasing Agent, . . . . .	88.19	4,124.27
Phillips Brooks House, Schedule 81, . . . . .	\$51.76	
Hemenway Gymnasium, Schedule 82, . . . . .	322.04	373.80
		<u>\$231,544.96</u>

## SCHEDULE 13

## GRADUATE SCHOOL OF BUSINESS ADMINISTRATION

## INCOME AND EXPENDITURE

For the year ended June 30, 1912

## INCOME

Graduate School of Business Administration Balance (interest), .	\$498.48	
Edward Cogswell Converse Professorship in Banking, interest, . . . . .	745.87	
Daniel A. Buckley Scholarship, interest (part), . . . . .	150.00	
Gifts for immediate use:		
Under the guarantee, . . . . .	\$22,300.00	
Other Gifts:		
For general use, . . . . .	175.00	
For loans, . . . . .	125.00	
For courses in printing, . . . . .	2,307.88	
For Shaw Fund, Business Research, . . . . .	1,350.00	
William Endicott, Jr., Books on Trans- portation, . . . . .	100.00	
Harry Hodgson, prizes, . . . . .	75.00	
George O. May, prizes, . . . . .	300.00	
Andrew W. Preston, South American Course, . . . . .	2,000.00	
Joseph E. Sterrett, books on accounting, .	100.00	28,732.88
Receipts from students.		
Tuition fees, . . . . .	\$10,460.00	
Graduation fees, . . . . .	160.00	
Laboratory fees, . . . . .	9.00	
Sale Business 10 pamphlet, . . . . .	12.40	10,641.40
		<u>\$40,763.63</u>

## GRADUATE SCHOOL OF BUSINESS (CONTINUED)

## EXPENDITURE

From Gifts for Loans, . . . . .	\$370.00		
George O. May Gift for Prizes, . . . . .	150.00		
Joseph E. Sterrett Gift for Books, . . . . .	87.20		
Shaw Fund for Business Research, . . . . .	1,896.63		
D. A. Buckley Scholarship, . . . . .	150.00		
A. W. Preston Gift, . . . . .	\$2,000.00		
Less amount paid for salaries, . . . . .	2,000.00		
Gifts in support of Printing Courses, . . . . .	\$1,807.88		
Less amount paid for salaries, . . . . .	500.00	807.88	\$2,861.71
Dean's Office.			
Salary, . . . . .	\$500.00		
Services and wages, . . . . .	897.00		
Expenses, . . . . .	325.90		1,722.90
General.			
Salaries, . . . . .	\$23,500.00		
Services and wages, . . . . .	20.00		
Outside lecturers, . . . . .	4,672.73		
Books, . . . . .	1,144.94		
Equipment and supplies, . . . . .	138.73		
Printing, . . . . .	407.96		
Hospitality and travelling expenses, . . . . .	376.22		
Scholarships from unrestricted income, . . . . .	750.00		
Study Tours, . . . . .	498.07		
Reading room, . . . . .	466.51		
Adjustment, amount credited to general account in 1910-11, and belonging to Loan Fund account, . . . . .	100.00		
Sundry expenses in courses, . . . . .	102.66		
Legal services, . . . . .	75.00		
Sundries, . . . . .	45.43		32,298.24
University charge :			
President's Office, salaries and expenses, . . . . .	\$306.86		
Bursar's Office, collections and payments, . . . . .	332.66		
Medical Adviser, salary and expenses, . . . . .	61.93		
Publication Office, salary and expenses, . . . . .	179.23		
Annual Catalogue, . . . . .	80.09		
Inspector of Grounds and Buildings, salary and expenses, . . . . .	6.97		
Watchmen, . . . . .	2.80		
Labor, . . . . .	2.72		873.26
Phillips Brooks House, Schedule 31, . . . . .	\$33.09		
Hemenway Gymnasium, Schedule 32, . . . . .	206.74		239.83
Amount carried forward, . . . . .			\$37,995.94

## GRADUATE SCHOOL OF BUSINESS (CONTINUED)

## EXPENDITURE

Amount brought forward, . . . . .				\$37,995.94
General Surplus made up as follows :				
Restricted Income unused carried to Funds and Gifts, . . . . .	\$1,983.67			
Amount carried to General Suspense to repay former advance, . . . . .	100.00			
Reserve, carried to General Suspense, for use after the expiration of the guarantee, . . . . .	875.65			
				<u>\$2,959.32</u>
Less amount of accumulated income of				
Funds and Gifts used, . . . . .	\$145.00			
Amount of advance to Fund carried to				
General Suspense, . . . . .	46.63	191.63	2,767.69	
				<u><u>\$40,763.68</u></u>

## SCHEDULE 14

## DIVINITY SCHOOL

## INCOME AND EXPENDITURE

For the year ended June 30, 1912

## INCOME

Income of Funds for Instruction or for General Purposes.		
Divinity School balance (interest), . . . . .	\$361.94	
Endowment, . . . . .	3,535.64	
Oliver Ames, . . . . .	841.50	
Hannah C. Andrews, . . . . .	25.98	
Daniel Austin, . . . . .	55.24	
Adams Ayer, . . . . .	49.50	
Joseph Baker, . . . . .	756.11	
Beneficiary money returned (balance), . . . . .	12.52	
Bussey Professorship, . . . . .	1,860.40	
Bussey Trust (part), . . . . .	5,296.29	
Joshua Clapp, . . . . .	107.81	
Edwin Conant, . . . . .	187.80	
Dexter Lectureship, . . . . .	1,264.42	
Frothingham Professorship, . . . . .	2,806.80	
Abraham W. Fuller, . . . . .	51.97	
Lewis Gould, . . . . .	45.09	
John Hancock Professorship, . . . . .	\$297.40	
Charles L. Hancock (part), . . . . .	4,702.60	5,000.00
Haven, . . . . .	247.50	
Samuel Hoar, . . . . .	51.98	
Hollis Professorship of Divinity, . . . . .	1,708.64	
Henry P. Kidder, . . . . .	495.00	
Amount carried forward, . . . . .	\$35,262.18	



## DIVINITY SCHOOL (CONTINUED)

## INCOME

Amount brought forward, . . . . .	\$25,262.13	
<b>Income of Funds for Instruction or for General Purposes</b>		
<i>(continued).</i>		
Henry Lienow, . . . . .	454.66	
Caroline Merriam, . . . . .	51.97	
John Newgate, . . . . .	16.48	
Parkman Professorship, . . . . .	792.80	
John W. Quinby, . . . . .	35.45	
Abby Crocker Richmond, . . . . .	49.50	
John L. Russell, . . . . .	49.50	
William B. Spooner, . . . . .	495.00	
Thomas Tileston of New York Endowment, . .	1,980.00	
Mary P. Townsend, . . . . .	259.88	
Winthrop Ward, . . . . .	103.95	
Winn Professorship, . . . . .	2,912.88	
Augustus Woodbury Bequest, . . . . .	51.38	
Society for Promoting Theological Education Gift, Library, . . . . .	1,091.11	\$33,606.69
<b>Income of Scholarship, Beneficiary and Prize Funds.</b>		
Robert Charles Billings (prizes), . . . . .	\$132.66	
Abner W. Buttrick, . . . . .	677.26	
Thomas Cary, . . . . .	291.06	
George Chapman, . . . . .	146.12	
Joshua Clapp, . . . . .	233.83	
Jackson Foundation, . . . . .	771.21	
J. Henry Kendall, . . . . .	294.43	
Nancy Kendall, . . . . .	181.32	
John C. Kimball, . . . . .	7.43	
William Pomroy, . . . . .	52.42	2,787.74
<b>Income of Funds and Gifts.</b>		
Rushton Dashwood Burr, . . . . .	\$215.83	
Louisa J. Hall, . . . . .	48.46	263.79
<b>Receipts from Students.</b>		
Tuition fees, regular courses, . . . . .	\$3,925.00	
“ “ Andover students, . . . . .	1,756.33	
Divinity Hall, rents, . . . . .	2,840.00	8,521.33
Sale Dr. Everett's books, . . . . .	4.50	
“ Alumni Dinner Tickets, . . . . .	33.00	37.50
		\$45,217.05
<b>General Deficit made up as follows:</b>		
Principal of gift used, . . . . .	\$1,200.00	
Deficit, met by accumulated income, carried to General Suspense, . . . . .	6,977.55	
	\$8,177.55	
Less Income unused carried to Funds and Gifts, . .	1,422.21	6,755.34
		<u>\$51,972.39</u>

## DIVINITY SCHOOL (CONTINUED)

## EXPENDITURE

## From Scholarship Funds.

Thomas Cary, . . . . .	\$350.00	
George Chapman, . . . . .	129.08	
Joshua Clapp, . . . . .	200.00	
Jackson Foundation, . . . . .	638.00	
J. Henry Kendall, . . . . .	250.00	
Nancy Kendall, . . . . .	170.00	\$1,637.08

## From Beneficiary Funds.

Abner W. Buttrick, . . . . .	\$637.00	
William Pomroy, . . . . .	50.92	687.92

From Robert Charles Billings Fund, prize, . . . . . 100.00

## From Funds and Gifts.

Rushton Dashwood Burr, . . . . .	\$184.79	
Louisa J. Hall, . . . . .	42.50	
John W. Quinby, . . . . .	25.00	
Horace S. Sears Gift for Lectures, . . . . .	1,200.00	1,452.29

## Dean's Office.

Stationery, postage, telephone and telegraph, . . .	\$44.66	
Printing, . . . . .	21.30	65.96

## General.

Salaries, . . . . .	\$30,600.00	
Services and wages, . . . . .	2,181.85	
Equipment and supplies, . . . . .	205.03	
Stationery, postage, telephone and telegraph, . . .	101.19	
Books, . . . . .	575.65	
Advertising, . . . . .	41.96	
Care of grounds, . . . . .	120.00	
Printing, . . . . .	153.65	
Alumni Dinner, . . . . .	93.00	
Lectures, . . . . .	150.00	
Contribution American School of Oriental Study and Research, . . . . .	100.00	
Binding, . . . . .	48.20	
Share heat and light, Andover Theological Library, . . .	711.65	
" salaries, Andover Theological Library, . . .	1,145.83	
Instruction at Andover Theological School, . . .	687.10	
Moving books, . . . . .	90.25	
Board walks, . . . . .	89.01	
Sundries, . . . . .	65.78	87,109.65

## Divinity Library.

Repairs and equipment, land and building, . . . .	\$36.11	
Caretaking, land and building, . . . . .	941.19	977.30

## Divinity Hall.

Repairs and equipment, land and building, . . . .	\$5,586.71	
Caretaking, land and building, . . . . .	2,031.79	7,618.50

Amount carried forward, . . . . . \$49,648.70

## DIVINITY SCHOOL (CONTINUED)

## EXPENDITURE

Amount brought forward, . . . . .		\$49,648.70
University charge.		
President's Office, salaries and expenses, . . . . .	\$73.72	
Treasurer's Office, care of investments, . . . . .	443.37	
Bursar's Office, collections and payments, . . . . .	224.35	
Medical Adviser, salary and expenses, . . . . .	22.22	
Inspector of Grounds and Buildings, salary and expenses, . . . . .	134.68	
Publication Office, salary and expenses, . . . . .	35.84	
Quinquennial Catalogue, . . . . .	29.50	
Annual Catalogue, . . . . .	122.44	
Labor, etc., . . . . .	457.32	
Watchmen, . . . . .	54.04	
Engineer, . . . . .	50.64	
Janitor, . . . . .	92.66	1,740.78
Semitic Museum, Schedule 27, . . . . .	\$498.48	
Phillips Brooks House, Schedule 31, . . . . .	11.87	
Hemenway Gymnasium, Schedule 32, . . . . .	72.56	582.91
		<u>\$51,972.39</u>

## SCHEDULE 15

## LAW SCHOOL

## INCOME AND EXPENDITURE

For the year ended June 30, 1912

## INCOME

## Income of Funds and Gifts.

Law School balance (interest), . . . . .	\$3,274.52
Ames Fund, . . . . .	523.71
James Barr Ames Loan:	
Interest, . . . . .	\$69.79
Repayments, . . . . .	410.05
James Barr Ames Prize, . . . . .	209.24
James and Augusta Barnard, Law, . . . .	206.27
Gift of James Munson Barnard and Augusta Barnard (interest), . . . . .	88.64
Bemis Professorship (part), . . . . .	377.58
W. G. Bowdoin, Jr. Scholarship (gift), . . .	250.00
Bussey Professorship, . . . . .	1,187.01
Bussey Trust (part), . . . . .	5,296.29
James C. Carter Professorship, . . . . .	5,477.37
Amount carried forward, . . . . .	\$17,370.47

## LAW SCHOOL (CONTINUED)

## INCOME

Amount brought forward, . . . . .	\$17,870.47	
<b>Income of Funds and Gifts (continued).</b>		
<b>James Coolidge Carter Loan:</b>		
Interest, . . . . .	\$681.66	
Repayments, . . . . .	85.50	767.16
Dane Professorship, . . . . .		779.62
Samuel Phillips Prescott Fay 1798 Fund and Scholarship, . . . . .		256.17
George Fisher Scholarship, . . . . .		190.57
Hughes Loan, Interest, . . . . .	\$18.22	
Repayments, . . . . .	12.27	25.49
Huidekoper Scholarship (gift), . . . . .		200.00
Langdell Scholarship, . . . . .		1,801.21
Law School Book, . . . . .		2,327.54
Law School Library, . . . . .		4,950.00
<b>Harry Milton Levy Loan:</b>		
Repayments, . . . . .		275.98
Pennoyer Scholarship (part), . . . . .		80.00
Charles Elliott Perkins Scholarship (part), .		300.00
Princeton Fellowship, . . . . .		450.00
William Reed Scholarship, . . . . .		158.51
Royall Professorship, . . . . .		412.88
<b>Joshua Montgomery Sears, Jr. Memorial:</b>		
Interest, . . . . .	\$350.00	
Gift, . . . . .	650.00	1,000.00
Weld Professorship, . . . . .		4,702.26
<b>Scholarship Money Returned:</b>		
Gift, . . . . .	\$450.00	
Interest, . . . . .	23.52	
Repayments, . . . . .	133.81	606.83
Tuition fees, . . . . .		119,280.00
Sale of Quinquennial Catalogue, . . . . .		6.25
Sale of Library Catalogue, . . . . .		5.00
Unclaimed locker deposits, . . . . .		69.00
		<u>\$155,514.94</u>
<b>General Deficit, made up as follows:</b>		
Accumulated Income and Gifts used, . . . . .	\$5,565.56	
Deficit, met by accumulated income, carried to General Suspense, . . . . .	13,421.61	
	<u>\$18,987.17</u>	
Less Restricted Income unused, carried to Funds and Gifts, . . . . .	2,360.20	16,626.97
		<u><u>\$172,141.91</u></u>

## LAW SCHOOL (CONTINUED)

## EXPENDITURE

## From Funds and Gifts.

Ames Fund, . . . . .	\$425.00	
James Barr Ames Loan, . . . . .	1,439.58	
W. G. Bowdoin, Jr. Scholarship, . . . . .	250.00	
James Coolidge Carter Loan, . . . . .	610.00	
Samuel Phillips Prescott Fay, . . . . .	225.35	
George Fisher Scholarship, . . . . .	150.00	
Hughes Loan, . . . . .	215.00	
Huidekoper Scholarship, . . . . .	200.00	
Langdell Scholarship, . . . . .	1,150.00	
Harry Milton Levy Loan, . . . . .	420.00	
Pennoyer Scholarship, . . . . .	80.00	
Charles Elliott Perkins Scholarship, . . . . .	300.00	
Princeton Fellowship, . . . . .	450.00	
William Reed Scholarship, . . . . .	175.00	
Research Scholarship, . . . . .	250.00	
Scholarship Money Returned Loan, . . . . .	1,590.00	
Joshua M. Sears, Jr. Prize, . . . . .	1,500.00	\$9,429.93

## Dean's and Secretary's Offices.

Salaries, . . . . .	\$2,500.00	
Services and wages, . . . . .	851.50	
Stationery, postage, telephone and telegraph, . . . . .	486.21	
Printing, . . . . .	162.03	
Equipment and supplies, . . . . .	77.84	4,077.08

Scholarships from unrestricted income, . . . . . 5,700.00

## General.

Salaries, . . . . .	\$76,425.00	
Services and wages, . . . . .	10,350.30	
Equipment and supplies, . . . . .	1,152.76	
Stationery, postage, telephone and telegraph, . . . . .	307.19	
Printing, . . . . .	620.64	
Books, . . . . .	20,908.87	
Binding, . . . . .	3,168.65	
Advertising, . . . . .	130.50	
Proctors, . . . . .	453.50	
Freight, . . . . .	73.15	
Travelling expenses of assistant librarian, . . . . .	1,817.99	
Diplomas, . . . . .	108.40	
Collation, American Bar Association, . . . . .	311.15	
Services messenger Supreme Judicial Court, . . . . .	50.00	
Reading examination books, . . . . .	30.00	
Moving books, . . . . .	35.50	
Olivart Library and expenses of purchase, . . . . .	14,928.84	
Sundries, . . . . .	45.78	130,918.23

Repairs and equipment, land and buildings, . . . . . \$4,294.81

Caretaking, land and buildings, . . . . . 7,595.49 11,890.30

Amount carried forward, . . . . . \$162,015.53

**LAW SCHOOL (CONTINUED)****EXPENDITURE**

Amount brought forward, . . . . .		<b>\$162,015.53</b>
<b>University charge.</b>		
President's Office, salaries and expenses, . . . . .	<b>\$2,119.22</b>	
Treasurer's Office, care of investments, . . . . .	527.84	
Bursar's Office, collections and payments, . . . . .	2,380.18	
Medical Adviser, salary and expenses, . . . . .	635.85	
Inspector of Grounds and Buildings, salary and expenses, . . . . .	492.98	
Publication Office, salary and expenses, . . . . .	11.94	
Quinquennial Catalogue, . . . . .	170.59	
Annual Catalogue, . . . . .	302.04	
Labor, etc., . . . . .	866.97	
Watchmen, . . . . .	198.08	
Janitor, . . . . .	296.20	
Engineer, . . . . .	161.75	
Purchasing agent, . . . . .	5.02	7,668.56
Phillips Brooks House, Schedule 81, . . . . .	<b>\$389.71</b>	
Hemenway Gymnasium, Schedule 82, . . . . .	2,118.11	2,457.82
		<b><u>\$172,141.91</u></b>

**SCHEDULE 16****MEDICAL SCHOOL****INCOME AND EXPENDITURE**

For the year ended June 30, 1912

**INCOME****Income of Funds for Instruction and General Purposes.**

<b>Anonymous Fund in the Department of Theory and Practice, . . . . .</b>		<b>\$518.01</b>
<b>Edward M. Barringer (part), . . . . .</b>		<b>998.46</b>
<b>Robert C. Billings, . . . . .</b>		<b>3,573.36</b>
<b>John B. and Buckminster Brown, . . . . .</b>		<b>1,268.78</b>
<b>Bullard Professorship of Neuropathology, . . . . .</b>		<b>3,774.42</b>
<b>John C. Cutter Bequest:</b>		
Interest, . . . . .	<b>\$296.59</b>	
Royalties on publications, . . . . .	118.68	
Miscellaneous sales, . . . . .	5.00	420.22
Calvin and Lucy Ellis (part), . . . . .	18,148.59	
Samuel E. Fitz, . . . . .	90.89	
Rebecca A. Greene Bequest, . . . . .	2,886.05	
Henry Harris (& income), . . . . .	741.01	
Amount carried forward, . . . . .		<b>\$81,859.79</b>

## MEDICAL SCHOOL (CONTINUED)

## INCOME

Amount brought forward, . . . . . \$31,859.79

## Income of Funds for Instruction and General Purposes

*(continued).*

Harvard Medical Alumni, . . . . .	305.61	
Harvard Medical Alumni (gifts), . . . . .	2,000.00	
Hersey Professorship ( $\frac{1}{2}$ income), . . . . .	400.39	
George Higginson, . . . . .	5,270.71	
John Homans Memorial, . . . . .	2,585.88	
Jackson Professorship of Clinical Medicine, . .	3,425.05	
Hamilton Kuhn Memorial, . . . . .	9,874.21	
William O. Moseley, . . . . .	2,629.69	
New subscription, . . . . .	1,923.08	
Lyman Nichols, . . . . .	496.00	
George F. Parkman, Medical Fund, . . . . .	424.76	
Henry L. Pierce (Residuary), . . . . .	1,941.25	
John D. Rockefeller, . . . . .	49,500.00	
Dr. Ruppener, . . . . .	462.14	
George C. Shattuck, . . . . .	3,698.89	
James Stillman Professorship, . . . . .	5,819.41	
Mary W. Swett, . . . . .	780.37	
Samuel W. Swett, . . . . .	990.00	
Quincy Tufts, . . . . .	99.00	
Henry Willard Williams, . . . . .	2,417.43	
Gifts for salaries, . . . . .	1,500.00	\$128,403.56

## Income of Fellowship Funds.

Austin Teaching Fellowships, . . . . .	\$2,875.00	
Charles Follen Folsom Memorial, . . . . .	642.70	
William O. Moseley, Jr., . . . . .	1,657.76	
George Cheyne Shattuck Memorial, . . . . .	278.64	
Frederick Sheldon (part), . . . . .	164.87	
Charles Eliot Ware Memorial, . . . . .	298.93	
John Ware " . . . . .	279.98	
Henry P. Walcott, . . . . .	1,284.14	7,482.02

## Income of Funds and Gifts for Scholarships and Aids.

Aesculapian Club (gift), . . . . .	\$150.00	
Edward M. Barringer (part), . . . . .	500.00	
Lucius F. Billings, . . . . .	270.71	
James Jackson Cabot, . . . . .	314.37	
David Williams Cheever, . . . . .	296.46	
Cotting Gift (interest), . . . . .	166.71	
Orlando W. Doe, . . . . .	153.55	
Joseph Eveleth (part), . . . . .	600.00	
John Foster, . . . . .	156.96	
Lewis and Harriet Hayden, . . . . .	292.40	

Amounts carried forward, . . . . . \$2,901.16 \$135,885.56

## MEDICAL SCHOOL (CONTINUED)

## INCOME

Amounts brought forward, . . . . .	\$2,901.16	\$185,885.58
<b>Income of Funds and Gifts for Scholarships and Aids</b>		
<i>(continued).</i>		
William Hilton (part), . . . . .	450.00	
William Otis Johnson, . . . . .	141.12	
Claudius M. Jones, . . . . .	840.61	
John B. Kissenger, . . . . .	149.89	
Alfred Hosmer Linder, . . . . .	284.58	
Loan Fund Medical School Class of 1879 (gift), . . . . .	50.00	
James Ewing Mears (gift), . . . . .	225.00	
Joseph Pearson Oliver, . . . . .	451.09	
Charles B. Porter, . . . . .	295.76	
Francis Skinner, . . . . .	271.12	
Charles Pratt Strong, . . . . .	267.85	
Isaac Sweetser, . . . . .	342.54	
John Thomson Taylor, . . . . .	278.45	
Edward Wigglesworth, . . . . .	285.91	
Special Scholarship for 1912-13 (gift), . . . . .	250.00	6,984.58
<b>Income of Prize Funds.</b>		
Ward Nicholas Boylston, . . . . .	\$235.77	
William H. Thorndike, . . . . .	479.26	715.03
<b>Income of Sundry Funds and Gifts for Special Purposes.</b>		
Frederick M. Allen Gift, Preventive Medicine, . . . . .	\$393.75	
Laboratory of Comparative Anatomy (gift), . . . . .	304.76	
Edward Austin (Bacteriological Laboratory), . . . . .	579.10	
J. Ingersoll Bowditch, . . . . .	349.52	
Boylston, for Medical Books, . . . . .	82.92	
Brinckerhoff Fund, . . . . .	145.38	
Katherine E. Bullard Gift, Neuropathology, . . . . .	500.00	
Gift for a salary, Cancer Commission, . . . . .	250.00	
Memorial Cancer Hospital Endowment:		
Interest, . . . . .	\$4,720.17	
Gift, . . . . .	500.00	5,220.17
Memorial Cancer Hospital Maintenance, . . . . .	406.80	
Memorial Cancer Hospital Proctor Maintenance, . . . . .	233.29	
Lawrence Carteret Fenno Memorial, . . . . .	135.90	
Lawrence Carteret Fenno Free Bed Fund, . . . . .	63.55	
Franklin H. Hooper Memorial Free Bed Fund, . . . . .	247.50	
Clara Endicott Payson Memorial Free Bed Fund, . . . . .	247.50	
Memorial Cancer Hospital Subscription (gifts), . . . . .	1,360.00	
Caroline Brewer Croft (part):		
Gifts, . . . . .	\$261.00	
Interest, . . . . .	2,344.93	
Fees and sales, . . . . .	63.10	2,669.03
Amounts carried forward, . . . . .	\$18,188.67	\$148,585.19



**MEDICAL SCHOOL (CONTINUED)****INCOME**

Amounts brought forward, . . . . .	\$13,188.67	\$143,585.19
<b>Income of Sundry Funds and Gifts for Special Purposes</b>		
<i>(continued).</i>		
Sale Duplicate Books, Library, . . . . .	586.10	
Thomas Dwight Memorial, . . . . .	3.07	
George Fabyan Foundation for Comparative Pathology, . . . . .	10,293.09	
<b>George Fabyan Foundation, Special:</b>		
Interest, . . . . .	\$486.34	
Sales, . . . . .	167.00	653.34
Charles F. Farrington, . . . . .	2,603.80	
F. B. Greenough (for surgical research), . . .	307.05	
Harvard Clinic (gift), . . . . .	746.02	
Henry Jackson Endowment, . . . . .	5,085.58	
Walter Augustus Lecompte Professorship of Otolaryngology, . . . . .	2,579.94	
Harriet Newell Lowell, . . . . .	133.65	
<b>Massachusetts Society for Promoting Agriculture</b>		
<b>Gift, Comparative Pathology:</b>		
Gift, . . . . .	\$1,200.00	
Interest, . . . . .	48.42	1,248.42
Medical Library, . . . . .	115.19	
Gift for Microscopes, etc., . . . . .	557.82	
<b>Gift for Investigation of Infantile Paralysis:</b>		
Gift, . . . . .	\$1,850.00	
Interest, . . . . .	80.42	1,930.42
Gift Research in Neurology, . . . . .	500.00	
Repayment Pathological Laboratory (interest), . .	63.23	
Gift for Pathological Laboratory (interest), . . .	303.53	
<b>John C. Phillips Gift, Pathological</b>		
Department. Gift, . . . . .	\$3,000.00	
Interest, . . . . .	76.74	3,076.74
Proctor, for the study of Chronic Diseases, . . .	2,618.36	
Gift for Recreation Grounds, . . . . .	20.00	
School of Comparative Medicine, . . . . .	333.18	
Henry Francis Sears Fund for Pathology, . .	1,734.49	
Storey Putnam Gift, Neuropathology, . . . .	600.00	
<b>Surgical Laboratory:</b>		
Gifts, . . . . .	\$1,020.00	
Interest, . . . . .	280.52	1,300.52
Gift for Surgical Library, . . . . .	250.00	
Zoe D. Underhill Research, . . . . .	109.54	
X-ray Apparatus (interest), . . . . .	21.16	
Warren Fund for Anatomical Museum, . . . .	557.18	
Amounts carried forward, . . . . .	\$51,520.04	\$143,585.19

# MEDICAL SCHOOL (CONTINUED)

## INCOME

Amounts brought forward, . . . . .	\$51,520.04	\$143,585.19
<b>Income of Sundry Funds and Gifts for Special Purposes</b>		
<i>(continued).</i>		
<b>Edward Wigglesworth Professorship of Dermatology, . . . . .</b>	<b>2,588.50</b>	<b>54,108.54</b>
Sale of heat and power, . . . . .	\$7,008.89	
Clinic fees, . . . . .	84.63	
Repayment of appropriation for lenses, . . . . .	188.00	
Rent of sign, . . . . .	65.00	7,341.02
<b>Receipts from students.</b>		
<b>Tuition Fees.</b>		
Regular courses, . . . . .	\$58,132.50	
Graduate courses, . . . . .	5,116.12	
Dental students, . . . . .	8,550.00	
Summer courses, . . . . .	13,370.00	
Division of Medical Sciences, . . . . .	940.00	
Special students, . . . . .	190.00	
Candidates for degree D.P.H., . . . . .	566.25	\$81,864.87
Graduation fees, . . . . .	60.00	
Matriculation fees, . . . . .	490.00	
Examination fees, . . . . .	96.00	
<b>Laboratory fees and supplies.</b>		
Anatomy, . . . . .	\$996.00	
Comparative Anatomy, . . . . .	208.00	
Chemistry, . . . . .	1,441.13	
Clinical Laboratory, . . . . .	48.61	
Histology, . . . . .	411.00	
Physiology, . . . . .	567.44	
Operative Surgery, . . . . .	227.00	
Surgical Technique, . . . . .	192.00	4,091.18
		86,602.05
		<u>\$291,686.80</u>

## EXPENDITURE

<b>From Fellowship Funds and Gifts.</b>		
Charles Follen Folsom Memorial, . . . . .	\$525.00	
George Cheyne Shattuck Memorial, . . . . .	225.00	
Frederick Sheldon, . . . . .	164.87	
Charles Eliot Ware Memorial, . . . . .	250.00	
John Ware Memorial, . . . . .	225.00	
Henry P. Walcott, . . . . .	583.84	\$1,973.21
<b>From Scholarship and Aid Funds and Gifts.</b>		
Aesculapian Club, . . . . .	\$150.00	
Edward M. Barringer (part), . . . . .	500.00	
Lucius F. Billings, . . . . .	225.00	
Amounts carried forward, . . . . .	\$875.00	\$1,973.21

## MEDICAL SCHOOL (CONTINUED)

## EXPENDITURE

Amounts brought forward, . . . . .	\$875.00	\$1,973.21
<b>From Scholarship and Aid Funds and Gifts (continued).</b>		
James Jackson Cabot, . . . . .	275.00	
David Williams Cheever, . . . . .	250.00	
Cotting Gift, . . . . .	125.00	
Orlando W. Doe, . . . . .	100.00	
Joseph Eveleth (part), . . . . .	600.00	
Lewis and Harriet Hayden, . . . . .	250.00	
William Hilton (part), . . . . .	450.00	
William Otis Johnson, . . . . .	96.25	
Claudius M. Jones, . . . . .	250.00	
Alfred Hosmer Linder, . . . . .	250.00	
Loan Fund Medical School Class of 1879, . . .	40.00	
James Ewing Mears, . . . . .	225.00	
Joseph Pearson Oliver, . . . . .	400.00	
Charles B. Porter, . . . . .	250.00	
Francis Skinner, . . . . .	18.75	
Charles Pratt Strong, . . . . .	225.00	
Isaac Sweetser, . . . . .	250.00	
John Thomson Taylor, . . . . .	250.00	
Edward Wigglesworth, . . . . .	250.00	5,430.00
<b>From Prize Funds.</b>		
Boylston Prize expenses, . . . . .		12.50
<b>From Sundry Funds and Gifts for Special Purposes.</b>		
Frederick M. Allen Gift, Preventive Medicine, .	\$393.75	
Anatomical Research Gifts, . . . . .	266.58	
Gift for Equipment Comparative Anatomy Laboratory,	108.00	
Edward Austin (Bacteriological Laboratory), .	1,175.37	
Robert C. Billings, Journal of Medical Research,	600.00	
J. Ingersoll Bowditch, Physiology, . . . . .	301.68	
Boylston, Medical Books, . . . . .	79.56	
Katherine E. Bullard Gift, Neuropathology, .	550.02	
A. T. Cabot Gift, . . . . .	18.87	
Dr. John C. Cutter Bequest, . . . . .	300.00	
Gift for Study Diabetes Mellitus, . . . . .	67.27	
George Fabyan Foundation for Comparative Pathology, . . . . .	\$7,273.57	
Less paid for salaries, . . . . .	5,000.00	2,273.57
Charles F. Farrington, . . . . .	\$2,774.10	
Less paid for salaries, . . . . .	1,500.00	1,274.10
Gifts for the Investigation of Infantile Paralysis, .	994.92	
<b>Henry Jackson Endowment:</b>		
Warren Anatomical Museum, . . . . .	\$4,712.92	
Less paid for salaries, . . . . .	2,800.00	1,912.92
Amounts carried forward, . . . . .	\$10,816.61	\$7,415.71

## MEDICAL SCHOOL (CONTINUED)

## EXPENDITURE

Amounts brought forward, . . . . .	\$10,816.61	\$7,415.71
From Sundry Funds and Gifts for Special Purposes (continued).		
Walter Augustus Lecompte Pro- fessorship of Otology, . . . . .	\$3,470.88	
Less paid for salaries, . . . . .	1,800.00	670.88
Harriet Newell Lowell, . . . . .		931.84
Massachusetts Society for Promoting Agriculture Gift, Comparative Pathology, . . . . .		57.24
Medical Library, . . . . .		110.51
Gift for Microscopes, etc., . . . . .		557.82
Gift for Pathological Laboratory, . . . . .		150.13
Repayment Pathological Laboratory, . . . . .		509.05
John C. Phillips Gift, Pathological Department, . . . . .	\$3,299.94	
Less amount paid for salaries, . . . . .	2,000.00	1,299.94
Proctor, for the study of Chronic Diseases, . . . . .		2,103.12
Henry Francis Sears Fund for Pathology, . . . . .		1,740.87
Storey Putnam Gifts, Neuropathology, . . . . .	\$545.32	
Less amount paid for salaries, . . . . .	300.00	245.32
Surgical Laboratory, . . . . .		1,121.40
Gift, Research in Neurology, . . . . .		500.00
W. H. Walker Gift, . . . . .		4.50
Edward Wigglesworth Professorship of Dermatology, . . . . .		506.40
J. G. Wright Gift, Bacteriology, . . . . .		3.40
Books, from proceeds of sale of duplicates, . . . . .		121.43
Gift for Recreation Grounds, . . . . .		323.47
Cancer Hospital:		
Memorial Cancer Hospital Endow- ment Fund, . . . . .	\$6,000.00	
Less paid for salaries, . . . . .	3,500.00	2,500.00
Gift for current expenses, . . . . .		1,360.00
Memorial Cancer Hospital Maintenance Fund, . . . . .		6,972.25
Caroline Brewer Croft Fund (part), . . . . .		2,146.58
Gift salary Secretary Cancer Commission, . . . . .		250.00
Memorial Cancer Hospital Proctor Mainte- nance Fund, . . . . .		233.29
		34,736.05
Appropriations.		
Advertising and catalogues, . . . . .	\$1,098.87	
Anatomy, . . . . .	2,250.00	
Comparative Anatomy, . . . . .	1,869.00	
Books and service for the library, . . . . .	4,000.00	
Physiology, . . . . .	2,084.57	
Comparative Physiology, . . . . .	419.51	
Amounts carried forward, . . . . .	\$11,721.95	\$42,151.76

## MEDICAL SCHOOL (CONTINUED)

## EXPENDITURE

Amounts brought forward, . . . . .	\$11,721.95	\$42,151.76
<b>Appropriations (continued).</b>		
Biological Chemistry, . . . . .	2,727.40	
Bacteriology, . . . . .	900.00	
Preventive Medicine and Hygiene, . . . . .	2,066.21	
Materia Medica and Therapeutics, . . . . .	870.98	
Theory and Practice of Physic, . . . . .	1,152.73	
Clinical Medicine, . . . . .	7.50	
Pediatrics, . . . . .	109.71	
Surgery, . . . . .	1,048.49	
Obstetrics, . . . . .	75.00	
Neuropathology, . . . . .	385.00	21,014.97
<b>Dean's Office.</b>		
Salaries, . . . . .	\$1,166.68	
Services and wages, . . . . .	2,032.22	
Equipment and supplies, . . . . .	40.95	
Printing, . . . . .	166.32	
Stationery, postage, telephone and telegraph, . . . .	468.55	3,874.72
<b>General.</b>		
Salaries for instruction, . . . . .	\$126,090.65	
Summer courses.		
Fees repaid to instructors, . . . . .	\$12,033.00	
Salary of director, . . . . .	500.00	
Stationery, postage, printing, etc., . . . . .	863.91	13,396.91
Graduate courses.		
Fees repaid to instructors, . . . . .	5,077.10	
Services and wages, . . . . .	11,564.11	
Equipment and supplies, . . . . .	705.72	
Stationery, postage, telephone and telegraph, . . . .	1,751.70	
Printing, . . . . .	110.65	
Boston Medical Library, . . . . .	150.00	
Diplomas, . . . . .	53.06	
Travelling expense, . . . . .	92.00	
Clinic, . . . . .	1,704.85	
Proctors, . . . . .	24.00	
Dues Association of Medical Colleges, . . . . .	25.00	
Legal services, . . . . .	50.00	
Sundries, . . . . .	48.08	
Repairs and equipment, land and buildings, . . . .	5,001.25	
Caretaking, land and buildings, . . . . .	13,652.69	
Heat and Power, . . . . .	25,247.59	204,745.36
Retiring allowance, . . . . .		1,000.00
Balance of payments on an annuity, Schedule 34, . . . .		262.58
Interest on advances, . . . . .		1,387.10
Amount carried forward, . . . . .		\$274,436.49

## MEDICAL SCHOOL (CONTINUED)

## EXPENDITURE

Amount brought forward, . . . . . \$274,436.49

## University charge.

President's Office, salaries and expenses, . . . . .	\$721.81	
Treasurer's Office, care of investments, . . . . .	2,482.00	
Bursar's Office, collections and payments, . . . . .	1,844.56	
Inspector of Grounds and Buildings, salary and expenses, . . . . .	1,501.89	
Publication Office, salary and expenses, . . . . .	11.95	
Quinquennial Catalogue, . . . . .	145.32	
Annual Catalogue, . . . . .	373.53	
Purchasing Agent, . . . . .	2.76	7,088.32
		<u>\$281,469.81</u>

## General Surplus, made up as follows:

## Restricted Income unused added to

Funds and Gifts, . . . . .	\$23,436.49
General Suspense, . . . . .	746.02
	<u>\$24,182.51</u>

## Less Amount of accumulated income of

Funds and Gifts used, . . . . . \$10,800.05

## \*Deficit for the year carried to

General Suspense, . . . . .	3,715.47	14,015.52	10,166.99
		<u>\$291,636.80</u>	

\* A promised gift of \$5,000.00 for certain expenses of 1911-12 was not received until after the close of the fiscal year; otherwise there would have been a surplus for the year of \$1,284.53.

## SCHEDULE 17

## GRADUATE SCHOOL OF MEDICINE

## EXPENDITURE

For the year ended June 30, 1912

## Dean's Office.

Salaries, . . . . .	\$661.47	
Services and wages, . . . . .	94.67	
Stationery and postage, . . . . .	100.80	
Printing, . . . . .	61.95	\$918.89

## General.

Printing, . . . . .	<u>211.00</u>
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Deficit for year carried to General Suspense, . . . . . \$1,129.89

**DENTAL SCHOOL**  
**INCOME AND EXPENDITURE**  
For the year ended June 30, 1912

**INCOME**

**Income of Funds and Gifts.**

Dental School Endowment, Interest, . .	\$607.55	
" " " Sale speci-		
mens from Museum, . . . . .	580.50	\$1,188.05
Dental School Endowment of the Class of 1886, . . . . .		2.48
" " " " " " 1909, . . . . .		.99
Harvard Dental Alumni Endowment, . . . . .		311.55
Proctor Bequest, . . . . .		24.75
Joseph Warren Smith Jr., . . . . .		511.08
Henry C. Warren Endowment, . . . . .	1,138.50	\$3,177.40

**Gifts for immediate use.**

Dental School Research Fund, . . . . .	100.00
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**Receipts from students.**

Tuition fees, regular courses, . . . . .	\$26,420.00	
Less transferred to Medical School, . . . . .	8,550.00	\$17,870.00
Chemistry, breakage and supplies, . . . . .	755.41	
Examination fees, . . . . .	36.00	18,661.41
Fees from Infirmary, . . . . .		13,238.65
Sale of gold, . . . . .	\$615.63	
" merchandise, . . . . .	423.14	1,038.76
		<u>\$36,216.22</u>

**General Deficit made up as follows:**

Deficit carried to General Suspense, . . . . .	\$3,832.05	
Accumulated Income used, . . . . .	1,046.29	
	<u>\$4,878.34</u>	
Less Restricted Income unused, added to Funds and Gifts, . . . . .	580.50	4,297.84
		<u><u>\$40,514.06</u></u>

**EXPENDITURE**

**From Funds and Gifts.**

Harriet Newell Lowell (salaries), . . . . .	\$1,000.00	
Gift for X-ray apparatus, . . . . .	35.00	
Dental School Research Fund, . . . . .	111.29	\$1,146.29

**Dean's Office.**

Salaries, . . . . .	\$900.00	
Services and wages, . . . . .	2.88	
Stationery, postage, telephone and telegraph, . . . . .	171.48	
Printing, . . . . .	14.55	1,088.86

Amount carried forward, . . . . .	\$2,235.15
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## DENTAL SCHOOL (CONTINUED)

## EXPENDITURE

Amount brought forward, . . . . .		\$2,235.15
<b>General.</b>		
Salaries for instruction, . . . . .	\$3,085.00	
Services and wages, . . . . .	5,637.70	
Equipment and supplies, . . . . .	12,678.58	
Stationery, postage, telephone and telegraph, . . .	509.10	
Printing, . . . . .	393.38	
Advertising, . . . . .	702.68	
Books, . . . . .	108.40	
Mechanical Department sundries, . . . . .	58.25	
Laundry, . . . . .	798.49	
Diplomas, . . . . .	15.32	
Rent of piano, . . . . .	45.00	
Legal services, . . . . .	125.00	
Boston Medical Library, . . . . .	50.00	
Dues to Dental Faculties Association of American Universities, . . . . .	50.00	
Dues to Institute of Dental Pedagogics, . . . . .	20.00	
Collation, . . . . .	56.00	
Expenses Delegate to Iowa City, . . . . .	125.00	
Hospital service, . . . . .	25.00	
Sundries, . . . . .	78.16	29,561.06
Interest on advances, . . . . .		550.73
Repairs and equipment, land and buildings, . . . . .	\$1,054.20	
Caretaking, land and buildings, . . . . .	6,108.49	7,157.69
<b>University charge.</b>		
President's Office, salaries and expenses, . . . . .	\$404.92	
Treasurer's Office, care of investments, . . . . .	33.76	
Bursar's Office, collections and payments, . . . . .	356.18	
Inspector of Grounds and Buildings, salary and ex- penses, . . . . .	105.90	
Publication Office, salary and expenses, . . . . .	11.95	
Quinquennial Catalogue, . . . . .	18.96	
Annual Catalogue, . . . . .	77.76	1,009.48
		<u>\$40,514.06</u>



SCHEDULE 19

**BUSSEY INSTITUTION**  
**INCOME AND EXPENDITURE**  
For the year ended June 30, 1912

**INCOME**

Income of Funds.

Bussey Institution balance (interest), . . . . .	\$364.23	
Bussey Trust (part), . . . . .	10,592.57	\$10,856.79
Gifts for present use, . . . . .		200.00
Board of animals, . . . . .	\$52.21	
Use of houses by College officers, . . . . .	1,380.00	
Rent of Antitoxin stable, . . . . .	1,008.32	
Sale of animals, . . . . .	7.60	
Laboratory fees, . . . . .	107.50	2,555.63
		<u>\$13,612.42</u>
Deficit, met by accumulated income, carried to General Suspense, .		5,147.12
		<u>\$18,759.54</u>

**EXPENDITURE**

Salaries, . . . . .	\$3,800.00	
Services and wages, . . . . .	3,992.92	
Equipment and supplies, . . . . .	2,681.14	
Stationery, postage, telephone and telegraph, . . . . .	134.53	
Printing, . . . . .	211.83	
Books, . . . . .	490.98	
Labor, . . . . .	278.00	
Binding books, . . . . .	81.60	
Sundries, . . . . .	22.68	
Repairs and equipment, land and buildings, . . . . .	265.64	
Caretaking, land and buildings, . . . . .	1,868.26	\$18,327.53
University charge.		
Treasurer's Office, care of investments, . . . . .	\$217.89	
Bursar's Office, collections and payments, . . . . .	117.97	
Inspector of Grounds and Buildings, salary and expenses, . . . . .	96.15	432.01
		<u>\$18,759.54</u>

**ARNOLD ARBORETUM**  
**INCOME AND EXPENDITURE**

For the year ended June 30, 1912

**INCOME**

**Income of Funds and Gifts.**

<b>Arnold Arboretum,</b> . . . . .	<b>\$6,207.49</b>	
<b>James Arnold,</b> . . . . .	<b>8,057.56</b>	
<b>Arboretum Construction Gifts (Interest),</b> . . . . .	<b>2,094.85</b>	
<b>Robert Charles Billings (part),</b> . . . . .	<b>670.75</b>	
<b>William L. Bradley Fund:</b>		
Gift for present use, . . . . .	\$990.00	
Interest, . . . . .	600.00	
Sales, . . . . .	640.00	<b>2,230.00</b>
<b>Francis Skinner,</b> . . . . .		<b>990.00</b>
<b>Bussey, for the Arnold Arboretum,</b> . . . . .		<b>114.25</b>
<b>Sears gift for Library,</b> . . . . .		<b>155.03</b>
<b>Massachusetts Society for Promoting Agriculture,</b> . . . . .		<b>238.24</b>
<b>Bayard and Ruth S. Thayer,</b> . . . . .	<b>742.50</b>	<b>\$21,500.17</b>

**For botanical exploration in China.**

Interest, . . . . .	\$22.58	
Sale of photographs and pamphlet, . . . . .	488.75	
Sale of botanical material, . . . . .	701.75	
Gifts, . . . . .	<u>1,453.63</u>	<b>\$2,666.65</b>
Gifts for present use, . . . . .	28,755.00	
Gift for books, . . . . .	<u>2,000.00</u>	<b>33,421.65</b>
Sale of publications, . . . . .		<b>184.56</b>
Sale of surplus material, . . . . .		<b>178.00</b>
		<u><u><b>\$55,284.38</b></u></u>

**EXPENDITURE**

<b>From William L. Bradley Fund, bibliography (part),</b> \$2,230.00	
<b>From Chinese Exploration Gifts,</b> . . . . .	<b>4,152.11</b>
<b>From gift for books,</b> . . . . .	<b>2,000.00</b>
<b>From Sears Gift for Library,</b> . . . . .	<b>1,104.64</b>
	<b>\$9,486.75</b>
<b>General.</b>	
Salaries, . . . . .	\$5,800.00
Services and wages, . . . . .	9,787.08
Equipment and supplies, . . . . .	3,090.78
Stationery, postage, telephone and telegraph, . . . . .	210.94
Printing, . . . . .	539.54
Labor, . . . . .	13,483.39
Water, heat, light, power and protection, . . . . .	839.38
Repairs and equipment, land and buildings, . . . . .	708.44
Rent of building, . . . . .	150.00
<b>Bradley Bibliography of Trees,</b> . . . . .	<b>7,906.47</b>
<b>Expenses of expeditions for collecting,</b> . . . . .	<b>1,159.47</b>
<b>Freight, express, etc.,</b> . . . . .	<b>393.12</b>

Amounts carried forward, . . . . . **\$44,018.61**    **\$9,486.75**

## ARNOLD ARBORETUM (CONTINUED)

## EXPENDITURE

Amounts brought forward, . . . . .	\$44,018.61	\$9,486.75
General ( <i>continued</i> ).		
Taxes on house, . . . . .	321.44	
Liability Insurance, . . . . .	78.00	
Sundries, . . . . .	59.31	44,472.36
University charge.		
Treasurer's Office, care of investments, . . . . .	\$260.85	
Bursar's Office, collections and payments, . . . . .	177.78	438.63
		\$54,397.74
General Surplus made up as follows:		
Added to Sundry Funds and Gifts, . . . . .	\$402.88	
" " Arboretum Construction Gifts, . . . . .	2,918.83	
	\$3,321.71	
Less Accumulated Income Funds and Gifts used, . . . . .	2,435.07	886.64
		<u>\$55,284.38</u>

## SCHEDULE 21

## BOTANIC GARDEN

## INCOME AND EXPENDITURE

For the year ended June 30, 1912

## INCOME

Income of Funds.		
Botanic Garden balance (interest), . . . . .	\$166.66	
Botanic Department ( $\frac{1}{2}$ income), . . . . .	1,230.69	
Lowell, for a Botanic Garden, . . . . .	3,878.73	
John L. Russell ( $\frac{1}{2}$ income), . . . . .	24.75	\$4,800.83
Gifts.		
For cases (interest), . . . . .	\$15.21	
For sugar-cane investigation (interest), . . . . .	16.02	
For immediate use, . . . . .	650.00	681.23
Botanical Museum, in adjustment of prior joint budget, . . . . .	\$2,000.00	
Laboratory fees in Botany, . . . . .	210.00	
Material supplied Radcliffe College, . . . . .	150.00	
Interest on mortgage, . . . . .	250.00	
Sale of junk, . . . . .	20.00	2,630.00
		<u>\$8,112.05</u>

## EXPENDITURE

Labor, . . . . .	\$4,536.31
Equipment and supplies, . . . . .	554.71
Stationery, postage, telephone and telegraph, . . . . .	39.49
Printing, . . . . .	4.25
Amount carried forward, . . . . .	\$5,134.76

## BOTANIC GARDEN (CONTINUED)

## EXPENDITURE

Amount brought forward, . . . . .	\$5,184.76	
Water, heat, light, power and protection, . . . . .	1,051.04	
Repairs and equipment, land and buildings, . . . . .	605.17	
Taxes, . . . . .	59.70	
Express and cartage, . . . . .	55.77	
Sundries, . . . . .	14.65	\$6,921.09
<hr/>		
University charge.		
Treasurer's Office, care of investments, . . . . .	\$62.91	
Bursar's Office, collections and payments, . . . . .	25.22	88.18
		<hr/>
		\$7,009.29
General surplus, made up as follows :		
Restricted Income unused, added to Funds and Gifts, . . . . .	\$81.23	
Surplus, carried to General Suspense, . . . . .	1,071.60	1,102.83
		<hr/>
		\$8,112.05
		<hr/>

## SCHEDULE 22

## BOTANICAL MUSEUM

## INCOME AND EXPENDITURE

For the year ended June 30, 1912

## INCOME

Botanical Museum balance, interest, . . . . .	\$83.26	
Gift for present use.		
Gift for Botanical Museum, . . . . .	2,500.00	
		<hr/>
		\$2,583.26
Deficit, met by accumulated gifts, carried to General Suspense, . . . . .	991.29	
		<hr/>
		\$3,574.55
		<hr/>

## EXPENDITURE

Services and wages, . . . . .	\$1,064.15	
Equipment and supplies, . . . . .	108.62	
Stationery, postage, telephone, etc., . . . . .	55.45	
Printing, . . . . .	65.58	
Books, . . . . .	17.45	
Botanic Garden, in adjustment of prior joint budget, . . . . .	2,000.00	
Expenses collection of plant specimens, . . . . .	250.00	\$3,556.25
University charge.		
Bursar's Office, collections and payments, . . . . .	18.80	
		<hr/>
		\$3,574.55
		<hr/>

GRAY HERBARIUM

INCOME AND EXPENDITURE

For the year ended June 30, 1912

INCOME

Income of Funds.

Gray Herbarium balance (interest), . . . . .	\$286.01	
Robert Charles Billings, . . . . .	742.50	
Asa Gray Memorial, . . . . .	1,619.19	
Asa Gray Professorship of Systematic Botany, .	1,061.82	
Herbarium, . . . . .	1,022.48	
Sarah E. Potter Endowment, . . . . .	10,048.44	
John L. Russell ( $\frac{1}{3}$ income), . . . . .	74.25	\$14,854.69
Asa Gray's copyrights, . . . . .		713.71
Gifts for immediate use, . . . . .		1,413.00
Sale of card index, . . . . .	\$1,619.69	
"    publications, . . . . .	50.81	
"    duplicate plants, . . . . .	10.60	1,681.10
		<u>\$18,662.50</u>

EXPENDITURE

From Asa Gray Professorship of Systematic Botany Fund.

Salary of Asa Gray Professor (part), . . . . .		\$1,061.82
Salaries, . . . . .	\$5,588.18	
Services and wages, . . . . .	3,636.59	
Equipment and supplies, . . . . .	1,126.53	
Stationery, postage, telephone and telegraph, . . . . .	106.63	
Printing, . . . . .	1,210.32	
Books, . . . . .	2,401.49	
Binding, . . . . .	105.90	
Freight, express, and sundries, . . . . .	56.74	
Expedition to Magdalena Islands, . . . . .	500.00	
Repairs and equipment, land and buildings, . . . . .	45.57	
Caretaking, land and buildings, . . . . .	286.60	15,064.55
University charge.		
Treasurer's Office, care of investments, . . . . .	\$193.33	
Bursar's Office, collections and payments, . . . . .	186.69	
Inspector of Grounds and Buildings, salaries and expenses, . . . . .	60.08	
Janitor, . . . . .	42.47	
Engineer, . . . . .	23.17	455.74
		<u>\$16,582.11</u>

Surplus for the year carried to General Suspense, . . . . .	2,080.39
	<u>\$18,662.50</u>

**OBSERVATORY**  
**INCOME AND EXPENDITURE**

For the year ended June 30, 1912

**INCOME**

**Income of Funds and Gifts.**

Advancement of Astronomical Science (1901), . . .	\$986.20	
Advancement of Astronomical Science (1902), . . .	1,020.44	
Thomas G. Appleton, . . . . .	247.50	
J. Ingersoll Bowditch, . . . . .	128.75	
Uriah A. Boyden, . . . . .	9,900.00	
J. Rayner Edmands, . . . . .	50.19	
Charlotte Harris, . . . . .	99.00	
Haven, . . . . .	2,227.50	
James Hayward, . . . . .	1,089.50	
Observatory Endowment, . . . . .	2,475.00	
Paine Professorship, . . . . .	2,475.00	
Robert Treat Paine, . . . . .	12,559.68	
Edward B. Phillips, . . . . .	5,459.55	
Josiah Quincy, . . . . .	648.25	
James Savage ( $\frac{1}{2}$ net income), . . . . .	444.75	
David Sears, . . . . .	2,238.25	
Augustus Story, . . . . .	662.31	\$48,596.82
<b>George R. Agassiz Gift, Catalogue, . . . . .</b>	<b>\$1,000.00</b>	
<b>Mrs. Henry Draper, gift for special research (addi-</b>		
<b>tional), . . . . .</b>	<b>4,800.00</b>	
<b>Gifts for present use, . . . . .</b>	<b>3,000.00</b>	<b>8,800.00</b>
<b>Use of house by College officer, . . . . .</b>	<b>\$600.00</b>	
<b>Sale of Annals, . . . . .</b>	<b>125.33</b>	
" photographs, . . . . .	89.55	
<b>Subscriptions to Bulletins, . . . . .</b>	<b>6.00</b>	<b>820.88</b>
		<b>\$58,217.70</b>
<b>General Deficit, made up as follows:</b>		
Advances to Funds, carried to General Suspense, .	\$701.16	
Balances of sundry accounts used, . . . . .	4,910.32	
	<b>\$5,611.48</b>	
<b>Less Restricted Income unused, added to Funds and</b>		
<b>Gifts, . . . . .</b>	<b>1,800.47</b>	<b>3,811.01</b>
		<b>\$57,028.71</b>

**EXPENDITURE**

From Advancement of Astronomical Science Fund (1901), . . . . .	\$1,175.00	
From Advancement of Astronomical Science Fund (1902), . . . . .	1,050.00	
From George R. Agassiz Gift, . . . . .	416.66	
From Uriah A. Boyden Fund.		
Salaries, . . . . .	\$4,048.50	
Services and wages, . . . . .	1,486.18	
Amounts carried forward, . . . . .	\$5,484.68	\$2,641.66

## OBSERVATORY (CONTINUED)

## EXPENDITURE

Amounts brought forward, . . . . .	\$5,484.63	\$2,641.66
From Uriah A. Boyden Fund ( <i>continued</i> ).		
Equipment and supplies, . . . . .	422.64	
Expedition to Jamaica, . . . . .	3,000.00	
Expedition to Peru, . . . . .	795.94	
Interest on advances, . . . . .	759.44	
Sundries, . . . . .	181.16	10,593.81
From Draper Memorial.		
Expedition to Peru, . . . . .	\$2,400.00	
Other payments, . . . . .	2,470.19	4,870.19
From Josiah Quincy Fund, . . . . .		542.75
Salaries, . . . . .	\$15,500.00	
Services and wages, . . . . .	10,458.46	
Equipment and supplies, . . . . .	3,798.59	
Stationery, postage, telephone and telegraph, . . . . .	645.16	
Printing, . . . . .	687.72	
Binding, . . . . .	588.69	
Books, . . . . .	232.47	
Repairs and equipment, land and buildings, . . . . .	407.91	
Caretaking, land and buildings, . . . . .	2,924.01	
Taxes, . . . . .	129.85	
Printing Annals, . . . . .	4,308.69	
Use of house, . . . . .	90.00	
Freight and teaming, . . . . .	344.74	
Sundries, . . . . .	24.44	
	<u>\$40,085.23</u>	
Less cost printing certain Annals, paid by other Funds, . . . . .	2,446.23	37,639.00
University charge.		
Treasurer's Office, care of investments, . . . . .	\$487.95	
Bursar's Office, collections and payments, . . . . .	211.59	
Purchasing Agent, . . . . .	41.76	741.30
		<u><u>\$57,028.71</u></u>

MUSEUM OF COMPARATIVE ZOOLOGY

INCOME AND EXPENDITURE

For the year ended June 30, 1912

INCOME

Income of Funds.

Museum of Comparative Zoölogy balance (interest),	\$931.88	
Agassiz Memorial, . . . . .	14,747.69	
Alexander Agassiz Bequest, General Purposes, (part), . . . . .	2,311.90	
Alexander Agassiz Bequest for Publications, . . . . .	4,692.36	
George R. Agassiz, . . . . .	1,507.96	
Virginia Barret Gibbs Scholarship, . . . . .	294.28	
Gray Fund for Zoölogical Museum, . . . . .	2,475.00	
Sturgis Hooper, . . . . .	5,315.85	
Humboldt, . . . . .	883.18	
Willard Peele Hunnewell, . . . . .	247.50	
Permanent Fund for Museum of Zoölogy, . . . . .	5,814.72	
Henry L. Pierce, Residuary (part), . . . . .	4,716.25	
Teachers' and Pupils', . . . . .	875.90	
Maria Whitney, . . . . .	328.63	
Maria Whitney and James Lyman Whitney, . . . . .	1.29	\$44,144.39
Gift Mrs. William Barbour, for illustrations, . . . . .		1,785.50
Use of lecture rooms by Radcliffe College, . . . . .	\$700.00	
Sale of publications, . . . . .	226.44	
Lost books, . . . . .	8.00	929.44
		<u>\$46,859.33</u>
General Deficit, made up as follows:		
Accumulated Income of Sturgis Hooper Fund, . . . . .	\$184.15	
Principal of Alexander Agassiz Bequest for Publications, . . . . .	8,708.30	
Deficit met by accumulated Income, carried to General Suspense, . . . . .	1,553.52	
	<u>\$10,445.97</u>	
Less Restricted Income unused, added to Funds and Gifts, . . . . .	580.76	9,865.21
		<u><u>\$56,724.54</u></u>

EXPENDITURE

From Sturgis Hooper Fund.

Salary of Sturgis Hooper Professor, . . . . .	\$5,500.00	
Alexander Agassiz Bequest for Publications, . . . . .	13,400.66	
Humboldt Fund, . . . . .	196.57	
Willard Peele Hunnewell Fund, . . . . .	142.01	
Maria Whitney Fund, . . . . .	85.54	
Virginia Barret Gibbs Scholarship Fund. Scholarship, . . . . .	250.00	
Gift Mrs. William Barbour, for illustrations, . . . . .	1,785.50	\$21,360.28
Amount carried forward, . . . . .		<u>\$21,360.28</u>



## MUSEUM OF COMPARATIVE ZOÖLOGY (CONTINUED)

## EXPENDITURE

Amount brought forward, . . . . .		\$21,860.28
Salaries, . . . . .	\$10,183.81	
Services and wages, . . . . .	8,193.89	
Equipment and supplies, . . . . .	4,024.96	
Stationery, postage, telephone and telegraph, . . . . .	188.57	
Printing, . . . . .	3,097.96	
Books, . . . . .	2,114.48	
Water, heat, light, power and protection, . . . . .	6,616.10	
Repairs and equipment, land and buildings, . . . . .	1,679.26	
Binding, . . . . .	692.88	
Collections, . . . . .	2,016.98	
Freight and cartage, . . . . .	348.51	
Travelling expenses, . . . . .	91.60	
Laundry work, . . . . .	58.25	
Sundries, . . . . .	35.01	39,841.76
University charge.		
Treasurer's Office, care of investments, . . . . .	\$575.44	
Bursar's Office, collections and payments, . . . . .	138.71	714.15
		\$61,416.19
Less the following items transferred :		
To the College, Schedule 8:		
Heating and service, . . . . .	\$3,427.50	
Publishing contributions from the Laboratories		
of Geography and Zoölogy, . . . . .	300.00	
Services of librarian, . . . . .	250.00	
	\$3,977.50	
To the University, Schedule 7:		
Total University charge, . . . . .	714.15	4,691.65
		<u>\$56,734.54</u>

## SCHEDULE 26

PEABODY MUSEUM OF AMERICAN ARCHAEOLOGY  
AND ETHNOLOGY

## INCOME AND EXPENDITURE

For the year ended June 30, 1912

## INCOME

## Income of Funds.

Peabody Museum balance (interest), . . . . .	\$121.70
Hemenway Fellowship, . . . . .	656.17
Mary Hemenway Fund for Archaeology, . . . . .	2,302.54
Peabody Building, . . . . .	1,456.04
Peabody Collection, . . . . .	2,480.59
Amount carried forward, . . . . .	<u>\$6,967.04</u>

## PEABODY MUSEUM (CONTINUED)

## INCOME

Amount brought forward, . . . . .	\$6,967.04	
Income of Funds ( <i>continued</i> ).		
Peabody Professor, . . . . .	2,480.59	
Eliza O. and Mary P. Ropes (part), . . . .	1,568.54	
Thaw Fellowship, . . . . .	1,182.57	
Henry C. Warren Exploration, . . . . .	495.50	
Susan Cornelia Warren, . . . . .	247.50	
Robert C. Winthrop Scholarship, . . . . .	314.77	
Huntington Frothingham Wolcott, . . . .	990.00	\$14,196.51
Gifts for present use, . . . . .		2,165.00
Overcharge for interest in 1910-11, . . . . .		48.71
		<u>\$16,410.22</u>

## EXPENDITURE

Thaw Fellowship, . . . . .	\$1,167.61	
Henry C. Warren Fund, explorations, . . . . .	475.00	
Mary Hemenway Fund, . . . . .	2,200.00	
Huntington Frothingham Wolcott Fund, specimens, . . . . .	640.44	
Robert C. Winthrop Scholarship, . . . . .	500.00	\$4,983.05
Services and wages, . . . . .	\$4,448.25	
Equipment and supplies, . . . . .	825.36	
Stationery, postage, telephone and telegraph, . . . . .	239.76	
Printing, . . . . .	104.00	
Books, . . . . .	221.43	
Binding, . . . . .	147.55	
Explorations, . . . . .	1,799.20	
Collections, . . . . .	284.60	
Freight, . . . . .	238.80	
Travelling expenses, . . . . .	227.61	
Rent space in deposit vaults, . . . . .	33.00	
Sundries, . . . . .	55.08	
Repairs and equipment, land and buildings, . . . . .	177.11	
Caretaking, land and buildings, . . . . .	1,415.77	10,161.97
University charge.		
Treasurer's Office, care of investments, . . . . .	\$163.65	
Bursar's Office, collections and payments, . . . . .	125.90	
Inspector of Grounds and Buildings, salary and expenses, . . . . .	154.71	
Watchmen, . . . . .	62.19	
Engineer, . . . . .	59.44	
Janitor, . . . . .	108.92	
Purchasing Agent, . . . . .	.46	674.27
Amount carried forward, . . . . .		\$15,819.29

## PEABODY MUSEUM (CONTINUED)

## EXPENDITURE

Amount brought forward, . . . . .		\$15,819.29
Less amounts transferred.		
Repairs, land and buildings, . . . . .	\$177.11	
Caretaking, land and buildings, . . . . .	1,415.77	
University charge, . . . . .	674.27	2,267.15
		<u>\$13,552.14</u>
The above amounts are transferred as follows :		
90% to University, Schedule 7, . . . . .	\$2,040.44	
10% to College, Schedule 8, . . . . .	226.71	
		<u>\$2,267.15</u>
General Surplus, made up as follows :		
Restricted Income unused, added to Funds and		
Gifts, . . . . .	\$833.57	
Amount carried to General Suspense to repay advance	810.16	
Surplus, carried to General Suspense, . . . . .	1,899.58	
	<u>\$3,043.31</u>	
Less advance to Fund, carried to General Suspense,	185.23	2,858.08
		<u>\$16,410.22</u>

SCHEDULE 27

## SEMITIC MUSEUM

## INCOME AND EXPENDITURE

For the year ended June 30, 1913

## INCOME

Gifts for Semitic Collection.		
Interest, . . . . .		\$192.41
Gifts for excavations in Palestine.		
Interest, . . . . .		77.58
Income from Charles L. Hancock Bequest, . . . . .		500.00
		<u>\$769.99</u>
Deficit, met by unrestricted principal of Gifts, . . . . .		2,667.18
		<u>\$3,437.17</u>

## EXPENDITURE

From gifts for Semitic Collection, . . . . .	\$2,349.48	
From gifts for excavations in Palestine, . . . . .	587.69	\$2,937.17
Curator, . . . . .		500.00
Repairs and equipment, land and building, . . . . .	\$123.21	
Caretaking, land and building, . . . . .	1,285.94	1,409.15
University charge.		
Treasurer's Office, care of investments, . . . . .	\$12.28	
Bursar's Office, collections and payments, . . . . .	32.75	
Amounts carried forward, . . . . .	\$45.03	\$4,846.32

## SEMITIC MUSEUM (CONTINUED)

## EXPENDITURE

Amounts brought forward, . . . . .	\$45.08	\$4,846.82
University charge ( <i>continued</i> ).		
Inspector of Grounds and Buildings, salary and expenses, . . . . .	88.38	
Watchmen, . . . . .	88.56	
Engineer, . . . . .	32.01	
Janitor, . . . . .	58.46	252.44
		<u>\$5,098.76</u>
Less amounts transferred.		
General expenses, . . . . .	\$1,409.15	
University charge, . . . . .	252.44	1,661.59
		<u>\$3,437.17</u>
The above amounts are transferred as follows :		
70% to University, Schedule 7, . . . . .	\$1,163.11	
30% to Divinity School, Schedule 14, . . . . .	498.48	
	<u>\$1,661.59</u>	

## SCHEDULE 28

## GERMANIC MUSEUM

## INCOME AND EXPENDITURE

For the year ended June 30, 1912

## INCOME

Income of Funds and Gifts.		
Germanic Museum balance (interest), . . . . .	\$63.46	
Emperor William, . . . . .	1,303.59	
Germanic Museum, . . . . .	495.69	
Germanic Museum Endowment, . . . . .	2,658.40	\$4,521.14
Sale of Handbooks, . . . . .		22.77
		<u>\$4,543.91</u>

## EXPENDITURE

General.		
Services and wages, . . . . .	\$4.75	
Equipment and supplies, . . . . .	77.55	
Printing, . . . . .	38.35	
Stationery and postage, . . . . .	28.57	
Freight, . . . . .	82.88	
Expenses of reception, . . . . .	41.16	
Dues to Museum associations, . . . . .	20.00	
Sundries, . . . . .	39.75	
Repairs and equipment, land and building, . . . . .	83.47	
Caretaking, land and building, . . . . .	991.48	\$1,402.91
Amount carried forward, . . . . .		<u>\$1,402.91</u>

## GERMANIC MUSEUM (CONTINUED)

## EXPENDITURE

Amount brought forward, . . . . .		\$1,402.91	
University charge.			
Treasurer's Office, care of investments, . . . . .	\$211.75		
Bursar's Office, collections and payments, . . . . .	32.14		
Inspector of Grounds and Buildings, salary and expenses, . . . . .	39.81		
Watchmen, . . . . .	16.15		
Engineer, . . . . .	15.41	815.26	
			\$1,718.17
Less University charge transferred to University, Schedule 7, . . .		315.26	
			\$1,402.91
General Surplus made up as follows :			
Restricted Income unexpended, added to Funds and Gifts, . . . . .	\$2,658.40		
Surplus carried to General Suspense, . . . . .	482.60	3,141.00	
			<u>\$4,543.91</u>

## SCHEDULE 29

## WILLIAM HAYES FOGG ART MUSEUM

## INCOME AND EXPENDITURE

For the year ended June 30, 1912

## INCOME

Income of Funds.			
William Hayes Fogg, . . . . .	\$2,475.00		
Gray Fund for Engravings, . . . . .	792.00		
William M. Prichard, . . . . .	743.30		
John Witt Randall, Interest, . . . . .	\$1,485.00		
Gift, . . . . .	30.00	1,515.00	
Mary R. Searle, Interest, . . . . .	91.67		
Gift, . . . . .	20.00	111.67	
Gift for Improvements, Gift, . . . . .	\$13,000.00		
Interest, . . . . .	31.48	13,031.48	\$18,668.45
Sale of photographs and catalogues, . . . . .	\$36.96		
For work in connection with photographs sold, . . . . .	13.86		
Balance subscriptions for purchase of drawings, . . . . .	23.63	74.45	
			<u>\$18,742.90</u>

## WILLIAM HAYES FOGG ART MUSEUM (CONTINUED)

## EXPENDITURE

From the following Funds :

**Gray Fund for Engravings.**

Curator, . . . . .	\$350.00	
Services, . . . . .	146.00	
Collections, . . . . .	609.48	\$1,005.48

<b>William M. Prichard, collections, . . . . .</b>		<b>164.78</b>
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**John Witt Randall.**

Curator, . . . . .	\$250.00	
Expenses, . . . . .	1,160.20	1,410.20

<b>Mary R. Searle, books, . . . . .</b>		<b>91.21</b>
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**General.**

Director, . . . . .	\$500.00	
Services and wages, . . . . .	1,246.24	
Equipment and supplies, . . . . .	83.48	
Stationery, postage, telephone and telegraph, . . .	64.57	
Printing, . . . . .	2.65	
Legal services, . . . . .	75.00	
Insurance, . . . . .	200.78	
Sundries, . . . . .	8.97	
Interest on advances, . . . . .	12.28	
Repairs and equipment, building, . . . . .	81.77	
Caretaking, building, . . . . .	2,459.22	4,784.86

**University charge.**

Treasurer's Office, care of investments, . . . . .	\$72.12	
Bursar's Office, collections and payments, . . . . .	65.80	
Inspector of Grounds and Buildings, salary and expenses, . . . . .	123.17	
Engineer, . . . . .	47.36	
Watchmen, . . . . .	88.49	396.44
		<b>\$7,802.87</b>

**Less amounts transferred.**

Caretaking, building, . . . . .	\$2,459.22	
University charge, . . . . .	396.44	2,855.66
		<b>\$4,947.21</b>

**The above amounts are transferred as follows :**

10% to University, Schedule 7, . . . . .	\$285.56
90% to College, Schedule 8, . . . . .	2,570.10
	<b>\$2,855.66</b>

**General Surplus, made up as follows :**

Income of Restricted Funds and Gifts not used, . .	\$13,714.81
Income Restricted Funds carried to General Suspense to repay former advances, . . . . .	294.81
	<b>\$14,009.12</b>

Less Accumulated Income of Funds and Gifts used, . . . . .	218.48	18,795.69
		<b>\$18,742.90</b>

APPLETON CHAPEL  
INCOME AND EXPENDITURE

For the year ended June 30, 1912

INCOME

Income of Funds.

Fund for Religious Services, . . . . .	\$51.18	
Increase Sumner Wheeler, . . . . .	2,475.00	
Edward Wigglesworth Memorial, . . . . .	7,425.00	\$9,951.18
Gift for choir expenses, . . . . .		295.00
Use of Organ, . . . . .		74.44
		<u>\$10,320.62</u>

EXPENDITURE

From George Wigglesworth gift, . . . . . \$185.91

General.

Preaching and morning services, . . . . .	\$3,945.00	
Administrator, . . . . .	400.00	
Organist and Choir-master, . . . . .	1,500.00	
Choir, . . . . .	1,989.00	
Equipment and supplies, . . . . .	186.71	
Stationery, postage, telephone and telegraph, . . .	.57	
Printing, . . . . .	71.10	
Repairs and equipment, land and buildings, . . . .	104.34	
Caretaking, land and buildings, . . . . .	1,042.44	
Repairing and tuning organ, . . . . .	50.59	
Music, . . . . .	117.25	
Sundries, . . . . .	44.12	9,451.12

University charge.

Treasurer's Office, care of investments, . . . . .	\$128.87	
Bursar's Office, collections and payments, . . . . .	55.18	
Inspector of Grounds and Buildings, salary and expenses, . . . . .	63.84	
Watchmen, . . . . .	45.75	
Janitor, . . . . .	44.95	
Engineer, . . . . .	24.52	363.06

\$9,950.09

General surplus made up as follows :

Restricted Income unexpended, added to Funds and Gifts, . . . . .	\$188.44	
Carried to General Suspense to repay former advances, . . . . .	182.09	870.53
		<u>\$10,320.62</u>

PHILLIPS BROOKS HOUSE

INCOME AND EXPENDITURE

For the year ended June 30, 1913

INCOME

Income of Funds.

Phillips Brooks House Endowment, . . . . .	\$520.10	
John W. and Belinda L. Randall, . . . . .	350.81	
Ralph H. Shepard, . . . . .	561.52	
Ralph Hamilton Shepard Memorial, . . . . .	271.81	\$1,703.74
		<u>\$1,703.74</u>

EXPENDITURE

Secretaries of Phillips Brooks House Association, . . .	\$1,000.00	
Equipment and supplies, . . . . .	72.08	
Books, . . . . .	8.45	
Receptions, . . . . .	300.00	
Services of matron, . . . . .	100.00	
Rent of piano, . . . . .	45.00	
Sundries, . . . . .	41.80	
Repairs and equipment, land and buildings, . . . . .	76.69	
Caretaking, land and buildings, . . . . .	1,489.08	\$3,128.05

University charge.

Treasurer's Office, care of investments, . . . . .	\$21.47	
Bursar's Office, collections and payments, . . . . .	45.36	
Inspector of Grounds and Buildings, salary and expenses, . . . . .	45.06	
Watchmen, . . . . .	32.27	
Engineer, . . . . .	17.80	
Janitor, . . . . .	81.71	193.17
		<u>\$3,321.22</u>

Less amounts transferred.

Repairs and equipment, land and buildings, . . . . .	\$76.69	
Caretaking, land and buildings, . . . . .	1,489.08	
University charge, . . . . .	193.17	1,758.89
		<u>\$1,562.83</u>

The above amounts are transferred as follows :

10% to University, Schedule 7, . . . . .	\$175.89	
Remainder, divided in proportion to the number of students :		
College, Schedule 8, . . . . .	1,146.57	
Graduate School of Applied Science, Schedule 12, . . . . .	51.76	
Graduate School of Business Administration, Schedule 13, . . . . .	33.09	
Amounts carried forward, . . . . .	\$1,407.81	\$1,562.83



# PHILLIPS BROOKS HOUSE (CONTINUED)

## EXPENDITURE

Amounts brought forward, . . . . .	\$1,407.81	\$1,562.33
Amounts transferred ( <i>continued</i> ).		
Divinity School, Schedule 14, . . . . .	11.87	
Law School, Schedule 15, . . . . .	339.71	
	<u>\$1,758.89</u>	
General surplus made up as follows:		
Restricted Income unused, added to Funds and Gifts, . . . . .	\$350.81	
Less deficit met by the accrued income of the Ralph Hamilton Shepard Memorial Fund, . . . . .	209.40	141.41
		<u>\$1,703.74</u>

## SCHEDULE 32

# HEMENWAY GYMNASIUM

## INCOME AND EXPENDITURE

For the year ended June 30, 1912

## INCOME

Fees for the use of		
Lockers, by students, . . . . .	\$2,108.50	
Gymnasium, by graduates, . . . . .	10.00	\$2,118.50
Deficit transferred to the following departments in pro- portion to the number of students.		
College, Schedule 8, . . . . .	\$7,141.53	
Graduate School of Applied Science, Schedule 12, . . . . .	322.04	
Graduate School of Business Administration, Schedule 13, . . . . .	206.74	
Divinity School, Schedule 14, . . . . .	72.56	
Law School, Schedule 15, . . . . .	2,118.11	
Episcopal Theological School, . . . . .	78.52	9,939.50
		<u>\$12,058.00</u>

## EXPENDITURE

Salaries, . . . . .	\$5,500.00	
Services and wages, . . . . .	1,241.89	
Apparatus, . . . . .	266.38	
Equipment and supplies, . . . . .	10.49	
Stationery, postage, telephone and telegraph, . . . . .	91.92	
Printing, . . . . .	30.35	
Rent of piano, . . . . .	54.00	
Sundries, . . . . .	1.75	
Repairs and equipment, land and building, . . . . .	271.48	
Caretaking, land and building, . . . . .	4,085.28	\$11,553.54
Amount carried forward, . . . . .		\$11,553.54

## HEMENWAY GYMNASIUM (CONTINUED)

## EXPENDITURE

Amount brought forward, . . . . .		\$11,553.54
University charge.		
Bursar's Office, collections and payments, . . . .	\$73.64	
Inspector of Grounds and Buildings, salary and expenses, . . . . .	241.09	
Watchmen, . . . . .	97.01	
Engineer, . . . . .	92.72	504.46
		<u>\$12,058.00</u>

## SCHEDULE 33

## STILLMAN INFIRMARY

## INCOME AND EXPENDITURE

For the year ended June 30, 1912

## INCOME

## Income of Funds and Gifts.

Robert Charles Billings, for Stillman Infirmary, . . . . .	\$2,997.58	
Free Bed Fund of the Class of 1868, . . . .	315.66	
" " for the Stillman Infirmary, . . .	32.32	
Herbert Schurz Memorial Free Bed Fund, . .	179.83	
Stillman Infirmary Gift, interest, . . . . .	401.09	
Henry P. Walcott, . . . . .	158.59	\$4,085.02

## Receipts from Students.

Infirmary annual fees, . . . . .	\$14,788.00	
Receipts from patients, . . . . .	3,616.81	18,404.81
		<u>\$22,489.83</u>

## EXPENDITURE

Services and wages, . . . . .	\$6,951.29	
Equipment and supplies, . . . . .	6,889.59	
Stationery, postage, telephone and telegraph, . . . .	217.85	
Printing, . . . . .	17.85	
Sundries, . . . . .	9.40	
Repairs and equipment, land and buildings, . . . . .	765.96	
Caretaking, land and buildings, . . . . .	5,691.97	\$20,543.41
Interest on advances, . . . . .		36.12

## University charge.

Treasurer's Office, care of investments, . . . . .	\$53.70	
Bursar's Office, collections and payments, . . . .	117.97	
Medical Adviser, salary and expenses, . . . . .	750.00	
Amounts carried forward, . . . . .	\$921.67	\$20,579.53

## STILLMAN INFIRMARY (CONTINUED)

## EXPENDITURE

Amounts brought forward, . . . . .	\$21.67	\$20,579.53
University charge ( <i>continued</i> ).		
Inspector of Grounds and Buildings, salary and expenses, . . . . .	114.91	
Labor, etc., . . . . .	148.42	
Engineer, . . . . .	44.02	1,224.03
		<u>\$21,803.55</u>
General Surplus, made up as follows :		
Restricted Income unused, added to Funds and Gifts, . . . . .	\$401.09	
Surplus carried to General Suspense, . . . . .	285.19	686.28
		<u><u>\$22,489.83</u></u>

## SCHEDULE 34

## FUNDS AND GIFTS FOR SPECIAL PURPOSES

## INCOME AND EXPENDITURE

For the year ended June 30, 1912

## INCOME

Alexander Agassiz Bequest (part), . . . . .	\$138.35	
Anonymous Fund, . . . . .	5,582.37	
Anonymous Gift for Anonymous Purpose, . . . . .	5,000.00	
Anonymous Gift for Gray Herbarium library building.		
Gift, . . . . .	\$15,000.00	
Interest, . . . . .	874.99	15,874.99
Walter F. Baker (part), . . . . .		143.64
Daniel A. Buckley Fund (part), . . . . .		1.50
Gifts for Arnold Arboretum Building (interest), . . . . .		46.72
Bussey Trust (part), . . . . .		9,479.52
Gift from the Carnegie Foundation, . . . . .		39,539.16
Class of 1834 Fund, . . . . .		82.53
" 1842 " . . . . .		5.75
" 1844 " . . . . .		482.42
" 1846 " . . . . .		710.23
" 1853 " . . . . .		153.66
" 1856 " . . . . .		371.25
T. Jefferson Coolidge Gift, construction chemical laboratory.		
Gift, . . . . .	\$50,000.00	
Interest, . . . . .	49.20	50,049.20
Caroline Brewer Croft (part), . . . . .		2,231.60
Dr. John C. Cutter Bequest (part), . . . . .		467.15
Paul Dudley Fund, . . . . .		210.38
Amount carried forward, . . . . .		<u>\$130,070.42</u>

## FUNDS AND GIFTS, ETC. (CONTINUED)

## INCOME

Amount brought forward, . . . . .	\$130,070.42	
<b>High Voltage Electrical Laboratory Building.</b>		
Gift, . . . . .	\$11,750.00	
Interest, . . . . .	78.88	11,828.88
<b>Calvin and Lucy Ellis Fund (part), . . . . .</b>		165.89
<b>Gift for Freshman Dormitories.</b>		
Gifts, . . . . .	\$341,879.10	
Interest, . . . . .	11,009.57	352,888.67
<b>Germanic Museum Building (interest), . . . . .</b>		8,370.72
<b>Wolcott Gibbs Memorial.</b>		
Gift, . . . . .	\$25.00	
Interest, . . . . .	2,014.24	2,039.24
<b>Godkin Lecture Fund, . . . . .</b>		749.53
<b>Gurney Fund (part), . . . . .</b>		500.00
<b>Harvard Memorial Society (interest), . . . . .</b>		90.63
<b>Charles L. Hancock Bequest (part), . . . . .</b>		15.26
<b>Collis P. Huntington Memorial Hospital Building.</b>		
Gift, . . . . .	\$102,500.00	
Interest, . . . . .	827.39	103,327.39
<b>Professorship of Hygiene, 1899 Fund (part), . . . . .</b>		10,705.08
"    "    1902    "    . . . . .		2,322.97
"    "    1908    "    . . . . .		2,048.59
<b>Ingersoll Lecture Fund, . . . . .</b>		309.82
<b>Gifts for a new University Library Building (interest), . . . . .</b>		621.58
<b>Gift for Architectural Studies, New Library Building, . . . . .</b>		1,250.00
<b>William Belden Noble Lectures Fund.</b>		
Interest, . . . . .	\$1,326.06	
Sales, . . . . .	89.82	1,415.88
<b>Henry S. Nourse Fund (part), . . . . .</b>		1,039.90
<b>Robert Troup Paine, . . . . .</b>		1,946.10
<b>Lectures on Political Economy Fund, . . . . .</b>		598.85
<b>Quarterly Journal of Economics.</b>		
Income of John E. Thayer Fund, . . . . .	\$791.41	
Sales, . . . . .	2,604.61	3,396.02
<b>Retiring Allowance Fund, . . . . .</b>		18,411.92
<b>Gift for Decorating Front of the Nelson Robinson, Jr. Hall</b>		
(interest), . . . . .		241.56
<b>Frederick Sheldon Fund (part), . . . . .</b>		20.00
<b>James Skillen Memorial Fund, . . . . .</b>		537.42
<b>George Smith Bequest, . . . . .</b>		19,069.99
<b>Alexander W. Thayer Fund (part), . . . . .</b>		480.00
<b>John Harvey Treat Fund (part), . . . . .</b>		3.00
<b>George Robert White Laboratories of Systematic Botany.</b>		
Gift, . . . . .	\$31,500.00	
Interest, . . . . .	454.62	31,954.62
Amount carried forward, . . . . .		\$706,408.83

**Amount brought forward, . . . . . \$706,408.83**

<b>Ira D. Van Dusee Scholarship Fund (part), . . . . .</b>	<b>235.18</b>
<b>Charles Wilder Fund, . . . . .</b>	<b>2,200.47</b>
<b>Daniel Williams Fund, . . . . .</b>	<b>817.05</b>
<b>Sarah Winslow Fund, . . . . .</b>	<b>237.41</b>
<b>Woodland Hill Fund, use of laboratory, . . . . .</b>	<b>1,000.00</b>
	<b><u>\$710,898.94</u></b>

Agassiz Estate, expenses, . . . . .	\$188.85
Anonymous Fund (part) annuity, . . . . .	5,600.00
Anonymous Gift for Anonymous Purpose, . . . . .	5,000.00
Walter F. Baker Fund, expenses, . . . . .	143.64
Daniel A. Buckley Fund, taxes, . . . . .	1.50
Francis H. Burr Memorial Gift, . . . . .	25,749.91
Bussey Trust (part).	
Annuities, . . . . .	\$4,000.00
Taxes and legal expenses, . . . . .	5,479.52
Gift from the Carnegie Foundation Retiring Allowances, . . . .	39,538.83
Class of 1853 Fund, Secretary of the Class, . . . . .	153.66
"    1856    "    "    "    "	363.75
Caroline Brewer Croft Fund (part) annuity, . . . . .	2,231.60
Dr. John C. Cutter Bequest, annuity, . . . . .	467.15
Dental School Building.	
Interest on advances, . . . . .	4,953.35
Paul Dudley Fund, lectures, . . . . .	200.00
Calvin and Lucy Ellis Fund (part) taxes, . . . . .	165.39
Freshman Dormitories gifts, . . . . .	280.56
Germanic Museum Building, . . . . .	50.14
Wolcott Gibbs Memorial, . . . . .	25,106.13
Gurney Fund (part) annuities, . . . . .	500.00
Gift for Gray Herbarium (Kidder Wing) construction, . . . .	162.41
Gray Herbarium, gift for Library wing, . . . . .	12,116.06
"        "        gift for George Robert White laboratories,	15,835.62
Charles L. Hancock Bequest, taxes, . . . . .	15.26
Harvard Memorial Society Fund, . . . . .	171.09
Collis P. Huntington Memorial Hospital Building, . . . . .	98,908.18
Professorship of Hygiene, 1899 Fund (part) annuity, . . . . .	10,572.89
"        "        1902    "        "        "	2,271.51
"        "        1908    "        "        "	1,617.75
Ingersoll Lecture Fund, printing, . . . . .	45.74
Library Building Architectural Studies gift, . . . . .	816.00
William Belden Noble Lectures Fund, . . . . .	1,274.78
Amount carried forward, . . . . .	\$258,930.77

## FUNDS AND GIFTS, ETC. (CONTINUED)

## EXPENDITURE

Amount brought forward, . . . . .		\$258,980.77
<b>Henry S. Nourse Fund.</b>		
Annuity, . . . . .	\$1,000.00	
Insurance and repairs on house, . . . . .	89.90	1,089.90
Lectures on Political Economy Fund, . . . . .		275.00
Quarterly Journal of Economics, . . . . .		2,969.41
Retiring Allowance Fund, . . . . .		12,309.44
Frederick Sheldon Fund, care of securities, . . . . .		20.00
James Skillen Memorial Fund, annuity, . . . . .		800.00
George Smith Bequest, annuities, . . . . .		900.00
Gifts for Improvements and Additions to The Soldier's Field.		
Interest on advances, . . . . .		393.80
Alexander W. Thayer Fund, annuity, . . . . .		480.00
John H. Treat Fund, legal services, . . . . .		8.00
Ira D. Van Duzee Scholarship Fund, expenses, . . . . .		235.18
Charles Wilder Fund, annuities, . . . . .		1,940.00
<b>Daniel Williams Fund.</b>		
Treasurer of Herring Pond Indians, . . . . .	\$265.07	
Treasurer of Mashpee Indians, . . . . .	507.11	772.18
<b>Sarah Winslow.</b>		
Minister at Tyngsborough, . . . . .	\$112.49	
Commission on income, credited to University, . . . . .	5.94	118.43
<b>Woodland Hill Fund.</b>		
Taxes, . . . . .	\$1,098.80	
Interest on advances, . . . . .	295.14	1,393.94
		<u>\$282,481.05</u>
Less Balance of Annuity to Medical School, Schedule 16, . . . . .		262.58
		<u>\$282,218.47</u>
<b>General Surplus, made up as follows:</b>		
Unexpended balance of new gifts for buildings		
carried to Funds and Gifts, . . . . .	\$448,282.78	
Restricted Income unused carried to Funds and Gifts, . . . . .	40,216.08	
		<u>\$488,498.86</u>
<b>Less advances to Funds and Gifts carried</b>		
to General Suspense, . . . . .	\$5,758.72	
Accumulated Income and Gifts used, . . . . .	49,059.67	54,818.39
		<u>428,680.47</u>
		<u><u>\$710,898.94</u></u>

*Certificate of the Committee of the Overseers of Harvard College, for  
examining the Accounts of the Treasurer*

The committee appointed by the Overseers of Harvard College to examine the accounts of the Treasurer for the year ending June 30, 1912, have, with the assistance of an expert chosen by them, examined and audited the Cash-book and Journal covering the period from July 1, 1911, to June 30, 1912, inclusive, and have seen that all the bonds, mortgages, notes, certificates of stock, and other evidences of property, which were on hand at the beginning of said year, or have been received by him during said year, are now in his possession, or are fully accounted for by entries made therein; they have also noticed all payments, both of principal and interest, indorsed on any of said bonds or notes, and have seen that the amounts so indorsed have been duly credited to the College.

They have in like manner satisfied themselves that all the entries for moneys expended by the Treasurer, or charged in his books to the College, are well vouched; such of them that are not supported by counter entries being proved by regular vouchers and receipts.

They have also, by the aid of said expert, satisfied themselves that all the entries for said year are duly transferred to the Ledger, and that the accounts there are rightly cast, and correctly balanced.

(Signed)

<p>F. L. HIGGINSON, <i>Chairman</i>, GRAFTON ST. L. ABBOTT, WILLIAM A. GASTON, WILLIAM ENDICOTT, JR. WILLIAM C. ENDICOTT.</p>	}	<p><i>Of the Committee on behalf of the Board of Overseers.</i></p>
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Boston, January, 1913.

# INDEX

Two or more entries on a page are indicated by a small figure at the right of the page number: 20<sup>3</sup> indicates three entries on page 20.

Abbreviations are used as follows:—

<i>A.</i> , Arnold Arboretum;	<i>L.</i> , Law School;
<i>B.</i> , Book Funds;	<i>M.</i> , Medical School;
<i>Be.</i> , Beneficiary and Loan Funds;	<i>O.</i> , Observatory;
<i>C.</i> , College;	<i>P.</i> , Professorship Funds;
<i>D.</i> , Divinity School;	<i>Pr.</i> , Prize Funds;
<i>F.</i> , Fellowship Funds;	<i>S.</i> , Scholarship Funds;
<i>G.B.</i> , Graduate School of Business Administration.	<i>U.</i> , University.

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## OFFICIAL REGISTER OF HARVARD UNIVERSITY

*[Entered, March 24, 1905, at Boston, Mass., as second-class matter,  
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Issued at Cambridge Station, Boston, Mass., six times a year.

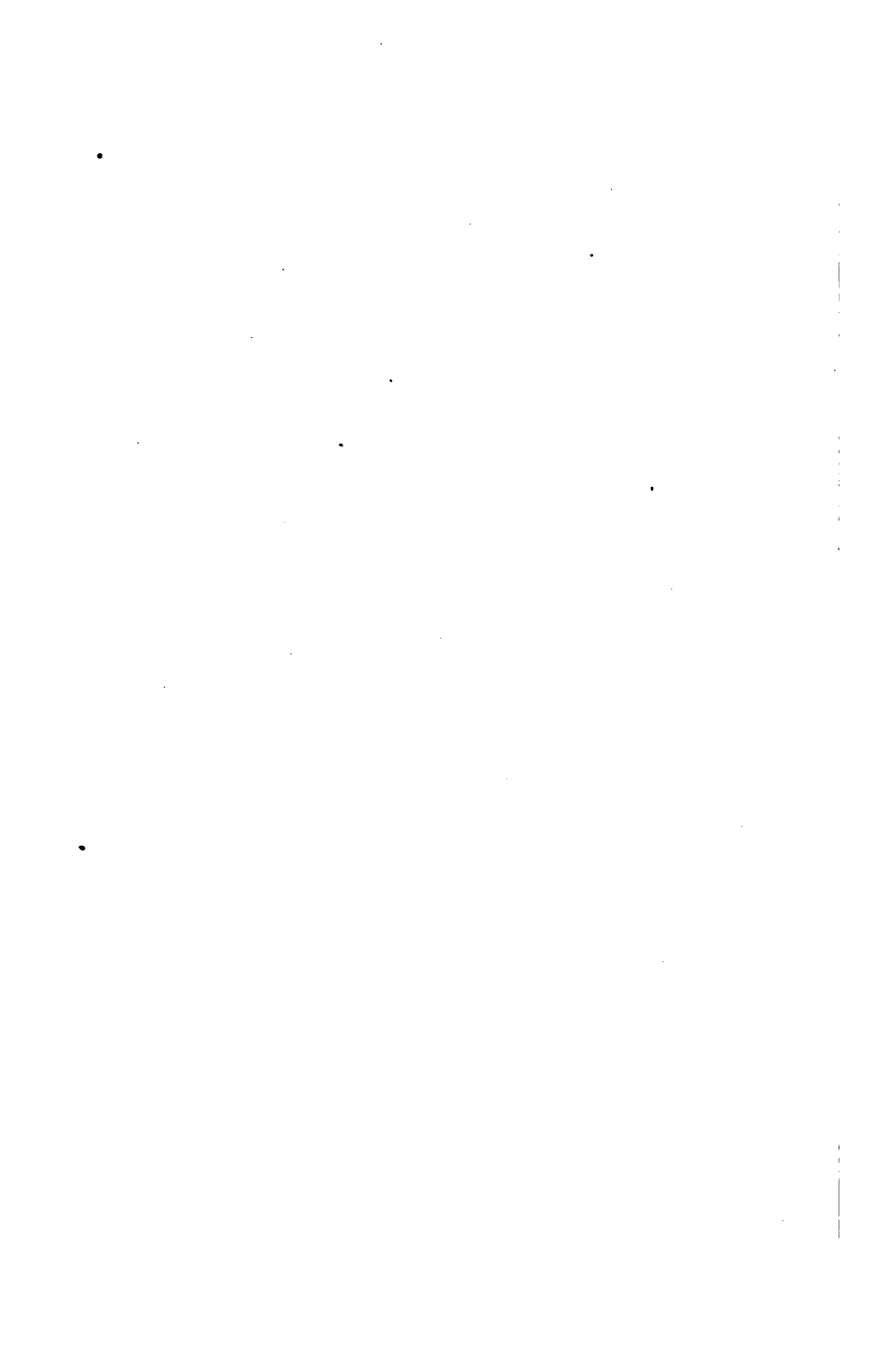
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